Bc

D 27 .C5 1925b
Chatterton, E. Keble (Edward Keble), 1878-1944.
Battles by sea

BATTLES BY SEA

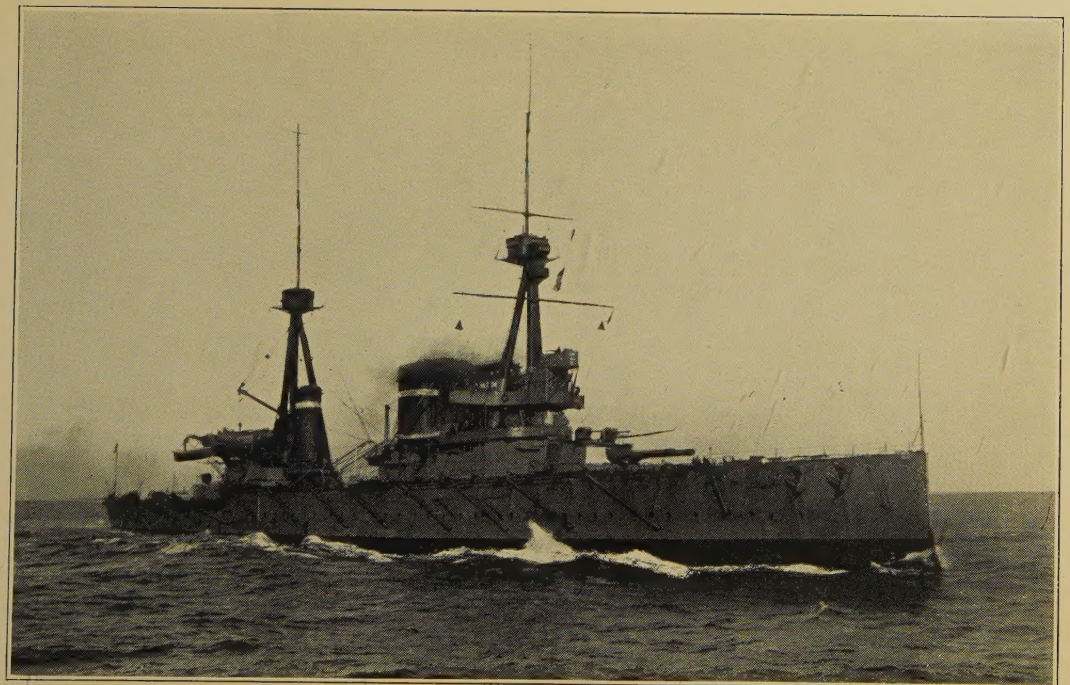
BOOKS ON THE SEA BY
E. KEBLE CHATTERTON

HISTORICAL

SAILING SHIPS AND THEIR STORY
SHIPS AND WAYS OF OTHER DAYS
FORE AND AFT: THE STORY OF THE FORE AND AFT RIG
STEAMSHIPS AND THEIR STORY
THE ROMANCE OF THE SHIP
THE STORY OF THE BRITISH NAVY
KING'S CUTTERS AND SMUGGLERS
THE ROMANCE OF PIRACY
THE OLD EAST INDIAMEN
Q-SHIPS AND THEIR STORY
THE MERCANTILE MARINE
SHIP-MODELS
THE AUXILIARY PATROL
SEAMEN ALL
STEAMSHIP MODELS

CRUISES

DOWN CHANNEL IN THE "VIVETTE"
THROUGH HOLLAND IN THE "VIVETTE"



[*Imperial War Museum, Crown Copyright.*

H.M.S. "INVINCIBLE"

Frontispiece

BATTLES BY SEA

BY

E. KEBLE CHATTERTON

AUTHOR OF
"SAILING SHIPS AND THEIR STORY," "SHIPS AND WAYS OF OTHER DAYS,"
"Q-SHIPS AND THEIR STORY," "THE AUXILIARY PATROL," ETC.

NEW YORK
THE MACMILLAN COMPANY
1925

27
.C5
1925b

PRINTED IN GREAT BRITAIN

PREFACE

In this book I have endeavoured to show the connecting principles of sea-fighting through the Galley Age, the Sailing-Ship Age, and the period of Steamships. The aim has been to present a clear picture of the admirals' intentions, to indicate how tactics were modified by the progress of time, or remained but little altered.

The scope of this inquiry is not that of finding which were the decisive battles, though some of these examples come under that heading. The ships, the characters of the Commanders-in-Chief, the difficulties which had to be overcome—these I have tried to present in such a way that the reader can visualize the events and the conditions.

I have in the course of my research consulted the acknowledged authorities—too numerous here to mention—of the separate periods and subjects. But as far as ever it has been possible, I have preferred to use the correspondence of actual participants in the battles.

For some of the prints in this volume I have to

acknowledge the courtesy of Messrs. T. H. Parker, 12A, Berkeley Street, W. My thanks are also due to Mr. F. J. P. Veale and the editor of *The Nineteenth Century*, by whose permission the plan illustrating the battle of Tsushima is here reproduced.

E. KEBLE CHATTERTON

CONTENTS

PAGE

INTRODUCTION - - - - - - xi

PART I.—THE GALLEY PERIOD

CHAPTER

I. BATTLE OF SALAMIS - - - - - 3

II. BATTLE OF ACTIUM - - - - - 46

III. BATTLE OF LEPANTO - - - - - 76

PART II.—THE SAILING-SHIP PERIOD

IV. THE ARMADA OPERATIONS - - - - 107

V. BATTLE OF THE SAINTS - - - - 131

VI. BATTLE OF THE GLORIOUS FIRST OF JUNE - - 151

VII. BATTLE OF ST. VINCENT - - - - 167

VIII. BATTLE OF THE NILE - - - - 179

IX. BATTLE OF TRAFALGAR - - - - 199

PART III.—THE AGE OF STEAM

X. BATTLE OF LISSA - - - - - 221

XI. BATTLE OF TSUSHIMA - - - - 239

XII. BATTLE OF THE FALKLANDS - - - - 254

INDEX - - - - - - 269

LIST OF ILLUSTRATIONS

	TO FACE PAGE
H.M.S. *Invincible*	*Frontispiece*
Mediterranean Galley	90
Battle of Lepanto	100
Sir Francis Drake	110
Charles, Lord Howard of Effingham	112
The *Ark Royal*, Elizabeth's Flagship	122
The Spanish Armada	124
Fireships among the Armada off Calais	126
Sixteenth-Century Warships	128
Lord Rodney	136
The Battle of the Saints	142
Battle of the Saints: Plan	144
Lord Howe	152
Battle of the First of June: Plan	160
The Glorious First of June, 1794	164
John Jervis, Earl of St. Vincent	168
Battle of St. Vincent	174
Battle of St. Vincent: Plan	176
A British Frigate under Way	186
Battle of the Nile: Plan	188
A British "74" off Portsmouth	190
A Brig of War off Dover	192
Battle of the Nile	194
The *Orient* on Fire	196
Horatio, Viscount Nelson	202

TO FACE PAGE

British Naval Signals - - - - - 204
Battle of Trafalgar: Plan - - - - - 208
Victory breaking the Enemy's Line - - - 210
H.M.S. *Victory* - - - - - - 212
Admiral Sir F. C. D. Sturdee, Bart., K.C.B. - - 254
H.M.S. *Carnarvon* - - - - - - 258
H.M.S. *Kent* - - - - - - 260

PLANS IN THE TEXT

PAGE

The Ægean Sea, 480 B.C. - - - - - 15
The Battle of Tsushima - - - - - 246

INTRODUCTION

I HAVE endeavoured in this volume, by selecting perhaps the twelve most interesting great sea-battles of history, to show the motive running through the naval mind of European nations from the earliest time until the Great War. I have particularly avoided any melodramatic delight in frenzied slaughter and blood-stained hulls; rather our object is the more impersonal one of examining the problem and watching the solution as if it were some intellectual game as naval chess. To this end the three great examples of the oar-propelled galley age—Salamis, Actium, and Lepanto—have been considered in great detail.

The second part covers the sailing-ship age, beginning with Armada, and including the battles of the Saints, the First of June, St. Vincent, the Nile, and Trafalgar. The third portion deals with the battles of the steamship age as exhibited in Lissa, Tsushima, and the Falklands. By reason of its indecisiveness the battle of Jutland has been intentionally omitted. But from these dozen fleet actions we are able to find, looking at them as parts of a whole, some basic and highly illuminating principles which have guided admirals of all ages and in every kind of ship able to take her place in the line-of-battle. Within the necessarily limited sphere every effort has been made to show suc-

cinctly the political causes which brought about the war, the character of the opposing Commanders-in-Chief, and to indicate the nature both of their problems and their fleets.

No decent-minded human being can possibly exult in the horrors of war, and those of us who had the great privilege of serving in the greatest of all wars prefer to forget than be reminded of anything that causes physical pain. But for all that there are few dramas, few struggles more fascinating to study than those between two great admirals in command of great fleets, pitting all their determination and ingenuity against each other for some great world-important cause. It is a magnificent inspiration to watch these brother sailors grappling with huge crises, and by their very cleverness and knowledge giving a sudden twist to history, altering the whole future of international progress.

There is a glamour about a sea-fight which is always irresistible, for the sea has in itself ever been the perpetual enemy common to both contestants. Thus, it may be that the true victor over the vanquished may in the evening of battle suffer marine disaster from wind and wave, whereas the conquering soldier can march home triumphant and safe. It is for this reason that a naval action brings out every possible gallant virtue in officers and men; it is for this that our sympathy is of a special kind. But there are other equally gripping considerations which arise as we look into these struggles. A fleet action is something more than it seems, for command of the sea is essential to the

very transportation and existence of an army that is separated from its home by the ocean.

Thus, whether we place our minds back into the period of Salamis, or the Nile, or Tsushima; whether we think of rowed galleys, ships under sail or driven by steam; the interest is all the same, the principle is identical, our sympathies are equally aroused. Human nature is much the same in any age; only material things alter. Our concern is with the former reacting to big dilemmas, wrestling with intricate puzzles, playing their own intellects and courage against others experienced in the same game. And it is because of the great stakes that all this becomes so extraordinarily intriguing. Any game with real opposition holds our attention; but when it is organized on scientific lines with wonderful ships and enthusiastic crews fighting for their homes and nation, the contest is raised instantly to the highest plane.

In these twelve battles fought by admirals of such differing mentality we shall see the clear-thinking, intuitive man, convinced of his plan's correctness, doing the right thing in accordance with unalterable principles. Contrariwise it will become evident how terribly dangerous to his own country is a Commander-in-Chief whose mentality is deficient, whose knowledge is inadequate, whose character is lacking in that fiery spirit essential to the winning of battles. For, no matter whether the weapon is the ram or the spear, the arrow or the gun; no matter whether the tactics are this or that, the personality of the leader expresses itself throughout the fleet. Nelson and Persano are

instances, but at opposite ends and in utterly different ways.

Especial prominence has been given in these chapters to what we may call the approach towards the battle—that is, until the shock of fighting commenced—at the time when both rival admirals, unfettered by incidental detail, are able to see calmly the big thing that is expected of them. In some of the earlier battles, after the first contact, the fighting resolves itself into a mere mêlée, from which the historian can make nothing but hand-to-hand fighting; yet whenever possible the essential methods have been carefully cleared of the battle fog. It is when we come to the sailing-ship days that scientific tactics enable us to watch warfare with added interest, and the ships used with greater understanding and utility.

The study of history is not a dull poring over dull statistics, but an enthralling meditation over the activities of our forefathers who were of like passions and minds to ourselves. In a given set of circumstances what should we have done? In a certain climax how should we have acted? That is the attitude of our study, and the answer to our inquiry is found when we look closely into the problems and see why this man failed and the other succeeded; in other words, the value of history is that it hands to us conclusions, a set of highly concentrated knowledge. Fortunately within recent years the value of this historical education has become appreciated, and in the British and American navies it is receiving the attention which it deserves. The opposite school, which believes

more in what an admiral once described to me as "how-to-use-spanner-and-nuts" education, forgets that materialism is a good servant but a dangerous master. It is the mind, which controls the material, that matters.

So in the following pages we are about to follow each great naval leader into battle, and, by his side, to see what he saw, to watch what he did. We shall not fail to share his emotions and his acute moments: at the same time we now know more than he did in those critical minutes, and if we are not able to derive certain lessons, if we are not permitted to realize for ourselves conclusions for future applications, then the reading of these great fights has been merely a pleasant exercise without any permanent value. But in our days, when only by sea-power we so narrowly escaped national disaster in the Great War, these naval problems throughout many hundreds of years cannot do otherwise than merit and win our closest attention, for they concern our very existence.

PART I

THE GALLEY PERIOD

CHAPTER I

BATTLE OF SALAMIS, 480 B.C.

THE campaign which culminated off the island of Salamis is one of the most interesting in the whole realm of history. The conception of the idea is so grand and immense, the development is so majestic towards its one great aim, the prize is so glittering and the results so tempting, that we read this story with the same enthusiasm with which we watch the unfolding of some profound drama. Indeed, this is like some immense spectacular pageant with ships by the hundred, sailors and soldiers by the thousand, and a daring showman at the back of it all, caring nothing for time or wealth or physical obstacles; bent only on carrying out a vast intention in a magnificent manner.

As in all artistic drama, too, we have here the clear, explicit preparation, detailed and careful; the action gets going with a rising interest and greater gripping power. We see the tense struggle looming up inevitably; we note the sweeping onward toward success by this daring protagonist; we hold our breath as we realize that the great climax now approaches, and that nothing can stop him in this the last and greatest exploit after his victorious advance. But in this ultimate hour of his colossal campaign, at the very peak of his amazing triumph, when the future of Europe was

about to be determined for all time, we have that tremendous catastrophe, that sudden reversal of fortune which utterly ruined those years of preparation and strenuous endeavour. The mighty victor becomes the vanquished, and has to return home crushed; while the curtain comes down on the play at the moment of its greatest interest.

Now, in order that we may not have to interrupt our narrative, let us get into our minds some clear picture of the kind of ships and the kind of fighting which were used at this period, because it is impossible to enter into the story with real keenness unless we can appreciate the difficulties and problems which had to be faced and overcome. True it is that strategy, like moral principles, is something permanent through the ages. But sea tactics have varied in different eras because of the varying belief in the value of certain weapons. To-day we rely chiefly on the big gun; and for that reason the battleship is nothing but a special kind of gun platform that can be moved about anywhere and in all weathers. But for many centuries in the Mediterranean reliance was placed on the ram, and this species of tactics demanded that both attacking ship and attacked should be able to move in and out of the fight with the utmost mobility. In those days a vessel could be propelled by sail or oars or both; there was no other alternative. Sail was all right and a great convenience for transports, victualling ships, merchantmen carrying corn, and even for getting the warships to their destination, provided the wind was fair. But in battle, where the ramming or rammed ship has to

box the compass, sometimes going into the very eye of the wind, masts and yards and sails and ropes would have been an utter nuisance. Therefore mobility in a fight was obtained by the employment of many oarsmen; there was no other way. The warship was in effect a kind of spear; the beak or ram was the metal point, the hull was the stout staff to which it was attached, and the oarsmen were, so to speak, the arm which throws the spear.

In order to get extreme manœuvring power two things are requisite: shallow draught and comparative lightness of construction consistent with strength. Thus these war craft were quite different from the big-bellied, slow-moving, but sail-propelled round ships which, relying on one large square-sail, were used for carrying corn and wine and other commodities with safety if not with despatch. The war galley, on the other hand, had not the room to carry much besides her own people, but as she lacked accommodation, and was so light of build, she was normally hauled ashore every night, or at least anchored close to the beach, while her people bivouacked and cooked their food on the adjacent land.

It is really quite interesting to note, in passing, the relation of the ship to the shore. The galley was land-tied because of accommodation, food, and physical endurance of the oarsmen. In the days of the Tudors, down to the domination by the steamship, the man-of-war could be independent of the land for months, provided only she had food and water. She carried far more men than ever the

galleys, and relied on the wind for her propulsion. But to-day we have got back rather to the oldest days, for the radius of a ship's action is limited by her fuel capacity: she is thus very much dependent on the shore. During the Great War the Germans went even a step further by making their battleships less floating homes for their crews than day ships for men brought straight from barracks.

We realize, then, that the warships we shall immediately consider are those light, quick darting, easily launched, oared galleys. When in making a passage the square-sail was set, this would have been observed to have no boom, but to be secured to a yard, which consisted of two spars lashed together. The sail was made of canvas or cloth, frequently coloured, as, for example (as we shall see in another chapter), purple for a royal personage. Scouting craft dyed both sails and gear the colour of the sea in order to camouflage their visibility. The yard was hoisted to the mast, and the sail was reefed or stowed by means of rope brails. The ropes themselves were made of the fibres of the papyrus plant or of twisted ox-hide, the edges of the sail also being bound with hide. These galleys possessed two kinds of sails and two kinds of masts; but just before battle the larger sails and masts were put ashore. The smaller ones were retained in case they should be needed. Thus the Greek word ἀκάτιον was used as a generic expression to include mast, sail and yard of the smaller type. The expression 'hoisting the akation' was the equivalent of 'running away from the enemy.' The reader will see for himself on a

later page an instance of a galley having her big gear aboard in the battle of Actium, and will notice the effect on the crew.

So much, then, for the kind of ships we are about to deal with: we must now consider the fighting personnel. The aim was to get the ship moving at her top speed, being steered by an oar-type of rudder on either quarter. The more quickly the craft was being rowed, so much more effective was likely to be the impact of the ram, which was either of metal or wood sheathed with metal. Now, having once got to close quarters, a kind of military battle began with the hurling of javelins and spears, and in a few minutes boarding would follow when the axe and sword would become available. Thus, apart from the oarsmen who were really nothing more than the propulsive engines of the galleys, there were carried heavy-armed soldiers or marines whose job was to get aboard the other craft as soon as possible and slay right and left. In the battle of Salamis the Hellenic hoplite was more powerfully armed, and had better protective armour than the Easterns who fought against him; and therefore, irrespective of the size of rival fleets, this superiority was bound to tell as soon as the battle began and close fighting ensued.

The triremes thus employed were about 150 feet long, or roughly the same as some of the early torpedo-boats built in England during the nineteenth century. With a draught of about 4 feet, a trireme with her large number of oarsmen could certainly travel fast. Out of her crew of two

hundred and twenty men, only from ten to forty were hoplites, so that it has been estimated that possibly a speed of ten knots could be made when required; but obviously only for a short period while the men were fresh. At the end of a tiring day's battle the 'akation' was often the only thing that saved them. With them the men usually had not more than three days' food and water supply, so that it was essential for them normally to keep near to the coast. Night coming on, during a long voyage such as we shall see immediately, these craft were turned and beached stern first, owing to the design aft where the hull swept up in a beautiful curve. Actually we have on a Greek vase, preserved in the British Museum, of about this date a contemporary picture of a smaller galley with its oarsmen and rudders and sail, so that it is possible to confirm literature of the past by painting of that period.

The great weakness of these ancient navies, then, lay in the matter of personal endurance: their radius of action was limited by the physical strength of the crews and the necessity for food and sleep. On the other hand, these warships with their standardized designs could be built quickly and easily wherever there was timber, and readily launched in large quantities. Thus, in a time of emergency, it was not such a difficult matter to bring a fleet into being, nor were skilled men nor long training necessary. The teaching of men how to row was not a very long operation, and the actual fighters were easily brought from the army to the ships. Skill, however, was necessary on the

part of the galley captains, for (as was shown in the early days when steamships tried ramming, and was proved many times when, during the Great War, destroyers and other craft tried to ram enemy submarines) it required both experience and talent so to handle the galley that her beak would hit the flank of the enemy. Another tactical move was to come crashing along so as to break all the oars on one side of the enemy. This, of course, meant that he was instantly out of control till he could get his spare oars into position: otherwise he would go round in a circle. Thus, ordinarily, the weakness of these oared fleets was in their flanks, and that was where a superior force would be at best advantage for thrusting home his spear-like injury against his foe.

We are now in a position to appreciate the great struggle which these ships were to decide. And first, let us note the preliminaries. What was the political cause of this war? What were the circumstances? What the dominating motive? Who were the respective parties? We must go back to the period of 521-485 B.C., when Darius I reigned as the real founder of the Persian Empire. About 515 B.C. he had subdued Thrace and even reached north of the Danube, reducing the Greek towns on the north coast of the Propontis and Ægean, and making the kingdom of Macedonia subject to Persia. In 499 B.C. the Ionian Greeks rebelled, but this was all ended five years later, and then he sent an expedition to Greece which was defeated at Marathon in 490 B.C.

But the reign of Darius ended in 485 B.C., when

he was succeeded by his eldest son Xerxes, and forthwith the latter began making preparations for the invasion of Greece on an immense scale. But the cause of the ensuing war was something more than the desire of Xerxes to carry out what his father had been unable to fulfil. Fundamentally the reason for the forthcoming hostilities was that opposition which always must exist between the East and West. But, from the Persian point of view, their honour was at stake, Marathon had not yet been avenged, and there had been considerable delay in the meantime. So, too, that vast Persian Empire, so secure on the Asiatic side of the Ægean, required for its perfect enjoyment of peace and security to have control over the European side, too. Greece had to be conquered, and it would mean an amphibious war.

As a triumph of organization, of a big idea carried out handsomely, the long sustained effort of Xerxes will live for all time. During those years between 485 and the spring of 480 B.C. the preparations had been progressing gigantically. For his men and materials Xerxes had that immense area from the Danube to the borders of India from which to draw. His aim was to collect both a great army and a great fleet: the army was to march all the way through Asia, skirting the north end of the Ægean, thence down south through Macedonia, Thessaly, and so on to Athens. The fleet, so far as was possible, was to advance by sea hugging the coast, as the army was to hug the sea, keeping in touch with each other wherever it was physically possible.

Xerxes planned to invade Hellas so that he might destroy both the navy and army of the Greeks, and then be able to do what he willed with the country bereft of all protection. His work went on through four busy years over that vast territory of empire. As was shown so clearly at the beginning of the recent Great War with Germany, the military value of dominions and dependencies at such a time is of the highest when a vast concentration of forces must be sent to the theatre of war. The Persian dominions and dependencies existed right up to the borders of Thessaly. As for the coast, Xerxes was able to tap the maritime resources of Egypt, Phœnicia, Cyprus, the coasts of Asia Minor, Ionia, the Sea of Marmora (Propontis), and Black Sea (Euxine). From all this sea fringe he thus amassed the not inconsiderable number of twelve hundred triremes, which were manned by 276,000 men, of whom 36,000 were marines. Later on, to these figures were added 120 European triremes and 24,000 men. There were also other units such as transports and victuallers (which would be of the round big-bellied, single-square-sail type), and some small craft. A fleet of 1,327 ships and 300,000 men! It would seem colossal in any age, but considering how much less populated was the world in those days, we may well gasp at the total. The mere task of feeding these men necessitated a considerable number of transports, whose number is uncertain, but has been reckoned to be 3,000. The concentration, begun in the autumn of 481 B.C., showed how excellent was the scheme, how perfect

the organization, how well-thought-out was every detail both as to movements and commissariat.

Some idea of the way these 1,327 fighting ships were gathered together may be obtained from the following Persian Navy List: Phœnician ships, 300; Egyptian, 200; Cyprians, 150; Cilicians, 100; Pamphylians, 30; Lycians, 50; Dorians, 30; Carians, 70; Ionians, 100; Nesiotes, 17; Æolians, 60; Hellespontians, 100; in addition to 120 European triremes. During that winter of 481-480 B.C. the harbours of Asia Minor were being filled with ships and men which were to assemble up the Dardanelles at Abydos, a little north of Chanak, so well known to the Allied Navies during the famous campaign of 1915. Abydos, of course, is on the Asiatic side of the Dardanelles, and hither marched the army of Xerxes on its way to Greece. But the crossing of the Dardanelles? The width here is between one and two miles, the prevailing wind for nine months out of the twelve is N.E., the current running to the S.W. is almost permanent, and the rate about three knots. Bridges made out of hundreds of boats with their bows head to stream were therefore moored across to Sestos, the fleet covering this movement.

After having been reviewed, the fleet came out of the Dardanelles and went north to the mouth of the Hebrus (the modern river Maritza). Here at Doriskos was the rendezvous for the whole of the fleet, and here they waited till the army of Xerxes, having crossed via Sestos into Europe, came along in its land stride. We now have that twin advance of the army by land and the fleet by sea, keeping

touch with each other, because the Persian army depended on the big-bellied ships for their food and forage, while the fighting fleet of galleys was necessary to escort this valuable convoy. Anyone with imagination can at once put his finger on the weakness of Xerxes' strength. For the greater the army, the more dependent was it on a greater number of freighters which could not protect themselves and invited attack, as transports always do. So, too, the more numerous the transports were, by such proportion was escort by warships requisite. Consequently, if the fleet of Xerxes could once be defeated, gone would be those very essentials which kept men and horses alive. The army would have no other alternative but to retreat as quickly as possible, since it was not possible for it to live on the country. Strategy, we said, is permanent, and the situation just outlined is capable of being repeated again when steel battleships and liner transports have taken the place of galleys and round cornships. A decisive sea victory is capable of making even an army's successes of no avail. We shall come to this point again presently.

Through Thrace the army continued its advance from Doriskos to Akanthos, the fleet following the coastline between Thasos and the mainland; and so at length they came to that mountainous peninsula of Athos, which projects from the south Macedonian coast into the Ægean, and rises to a height of over 6,000 feet. Most dreaded was the rounding of this peninsula by the mariners of these times, and in 492 B.C. the Persian fleet had been

wrecked completely. It was characteristic of Xerxes' thoroughness, however, that not only had he overcome the Dardanelles by triremes, penteconters, ropes, and windlasses ; but in his preparations he had so carefully foreseen this Athos difficulty, realized so fully that the loss of his fleet by the perils of the sea would wreck the whole campaign, that the fleet found awaiting them a canal which he had caused to be cut right across into the gulf the other side. Traces of this canal are still visible to-day.

The army marched straight across to Therma, better known to us as Salonica, while the fleet, after clearing the headlands, also came up the Therma gulf, commandeering more ships on the way, and finally brought up between Therma and the mouth of the River Axios, a distance of about twenty land miles. The sight of Xerxes' army and these hundreds of galleys and transports must have been one of the most amazing pictures ever seen in Salonica's gulf until the Great European War sent the Allied ships there. The success so far had been due to the wonderful preparations and complete organization by the Persians. Roads had been cut and levelled, bridges built, depots made for supplies and magazines. There can be no doubt of this excellent staff work, for, in spite of the difficulties, everything worked with smoothness, the army proceeding in three divisions on parallel roads, the fleet nearly always visible. The mistake, the bad strategical error, lay in keeping the fleet tethered to the army. Just as during the Great War the Grand Fleet, though as far away

MAP TO ILLUSTRATE XERXES' ROUTE

from Germany as the North of Scotland, still at that distance negatived the German High Seas Fleet, and so covered the transport of troops from England to France; so the fleet of Xerxes could have been employed with greater strategic success by being further south, seeking out the enemy and defeating him, thus rendering the fleet available for raids or any other purpose now that the transports would be free and unthreatened.

But, in fact, there was too much literal and direct co-operation between the two services, when the navy could have been used far more advantageously. It possessed a decided numerical superiority to the Greek naval concentration, and one decisive action in favour of the Persian fleet should have been possible and probable. The army could then have continued to do what it liked; the history of Greece would have been different from what followed. But opportunity has no sympathy for those who are blind to see the big chance, and it is pathetic to note so much splendid forethought, such strenuous years full of detailed preparation, such grand courage in overcoming obstacles—all being frittered away owing to a misconception as to the right way of employing a fleet in co-operation with an army. We are about to lead up to a failure that is far more illuminating than many of the successes in the story of human progress and endeavour. There are still foolish persons in the world who occasionally inquire, 'What is the good of history?' There are still naval and military officers who ask the same question of their respective service. The answer can only be that the

value of studying the past is that we shall learn never to repeat the mistakes of our predecessors, that we shall see to what foolish conclusion a given set of premises is bound to lead inevitably. As an example of the value of history in war we have only to mention that celebrated instance of the distinguished Allied general during the Great War who was tempted over and over again to shut his army up safely inside a fortress, but remembered that he had been taught by history of the fatal results which must always follow from this. History, then, is a series of maxims squeezed out of hard experience through the ages of existence. And the operations leading up to and including the battle of Salamis illustrate the great strategical maxim of employing a fleet correctly.

Just for the present let us leave the fleet and army of Xerxes at Therma while we pause to see what preparations the Greeks made against this threatening invasion. It must be confessed that they were singularly lacking in appreciating the danger which lurked. They were aware that ever since 484 B.C. their enemy was at work again getting ready. And yet not till almost too late did they realize the need for a united front against this threat. But if anything can rally peoples together at the last minute it is the possibility of their lands and homes being overrun by an enemy, and thus at last Greece joined together to resist the Persians. Athens had already learnt its lesson. 'The decade succeeding Marathon,' says Dr. Macan, 'was a period of struggle, reform, development for Athens. The state which fought at

Marathon was one thing, the state which fights at Salamis is another thing; a city of the soil is become a city of the sea.'

In other words, Athens had learned the meaning of sea-power, and the cause of this change was that war between Athens and Ægina which ended in 482 B.C. But if we look for the one man who brought this about we shall find him in Themistocles, that great Athenian statesman, who had fought in the battle of Marathon. It was he who was chiefly responsible for the immense developments of Athens as a sea-power, and could see that the Persians would sooner or later invade Greece again. It was he who realized that the issue would be decided only by sea. A consummate genius, a man with foresight and the power of decision, he was to be the founder of Athens' greatness as a naval power. And like other clever men who tell the plain unpleasant truth to unimaginative persons, he was never popular. That is of little consequence; he was efficient, and the saviour of Greece from the hands of the Persians.

Now the existing Greek fleet consisted of only seventy vessels. For years it had varied, and had been as low as even thirty. But it was obvious to him that those preparations going on in Asia, those activities in the Dardanelles and the Athos isthmus, must mean something and one thing in particular. About 482 B.C. he was able to persuade the Athenians that a fleet of two hundred warships should be built, and it was these which were to win the day; but for them Greece would have become part of the Persian Empire. His line of

persuasion was that the Athenians should build ships out of the surplus arising from the silver mines instead of distributing it among themselves. Each trireme and its equipment cost about one talent, the equivalent of £225 (reckoning by the standard of value of the year 1914).

But actually it was not until 481 B.C. that the public opinion in Greece was really roused to the imminence of danger, and a congress was held at the Isthmus of Corinth to consider the requisite preparations that should be made. Out of this came the creation of a defensive league and the agreement that Sparta should command both by land and sea. This league was founded on the information that the impending invasion was going to be on an immense scale, and on the inference that Xerxes was covetous not merely of Athens, but of all the Greek states. In the spring of 480 B.C. envoys from Thessaly were sent requesting that troops might be despatched to occupy the defile of Tempe, which was the easiest route from Macedonia into Thessaly; so, under Evænetus the Spartan and Themistocles the Athenian, ten thousand infantry were despatched, and landed at the Pagasæan gulf (Gulf of Volo), marched north, and occupied the pass. But in a short time the strategy was deemed to be unsound, the men were withdrawn, re-embarked, and sent home again. We shall, however, have reason presently to refer to this Pagasæan gulf in the course of our study.

We must now return to Therma and watch Xerxes' great advance. Starting eleven days ahead

of the fleet, the Persian army crossed the passes into Thessaly, but on the twelfth day at early dawn the Persian fleet set out from Therma, and by evening was off the 'ovens' of Magnesia. And now, preceded by scouting ships, the first contact was made with the Greek vessels, for the Persians captured light Æginetan, Trœzenian, and Athenian craft, which were obviously placed on the look-out for the coming of the Persian fleet. It seems likely that the Persian light craft had reached by this time the channel between Cape Sepias (on the heel of the Magnesian peninsula) and the island of Sciathos, in order to ascertain that all was clear for the fleet of Xerxes to advance. The latter was commanded by four admirals, and the inference is that it was organized into three divisions of about four hundred ships.

A glance at a chart or map will show that it was obvious the Persian fleet, in order to maintain touch with the army it was feeding, must come in north of Eubœa, down the Trikeri Channel into the Gulf of Malia, at the western end of which was Thermopylæ. Here, so to speak, was the last door to be unbarred before the approach to Athens. If the pass of Thermopylæ were forced, then the Persian army could overrun Attica, and be less than a hundred miles from Athens itself. It was obvious to anyone that in this neighbourhood of Thermopylæ there must inevitably be a violent clashing of wills.

About July the Greek fleet had occupied Trikeri Channel, and the Greek army was already at Thermopylæ, where we should exactly expect it

to be; for this pass was the only means of approach out of Thessaly into Locris, and extremely narrow. The hill where Leonidas and his three hundred Spartans would presently make their last stand against the hosts of Xerxes was at the western end of the pass. Such is the nature of the place that centuries later on two more battles were fought here.

We have, then, a most interesting situation about to develop. At length the squadrons and armies of the Persian King, after their long journey, after their years of organization, are about to fulfil their purpose, or fail handsomely. On the other hand, for Greece, the days of the greatest anxiety and suspense have arrived. So we can picture the Greek galleys sailing or rowing round from the south, coming north inside the channel between the mainland and the island of Eubœa, under Eurybiades and Themistocles. Note that in this long channel of ninety miles there is, abreast of Chalcis, a narrow sea pass known as the Euripus Channel, and if this could be blocked from the southward, all egress must be from the northern end of the Eubœa Island.

Now, having arrived in one long day from Therma to the Magnesian coast, the Persian naval Commander-in-Chief resolved to spoil the plans of the Greek fleet by surrounding them: he would attack them from the van and the rear, and the geography of the place would render this perfectly possible. Therefore, by nightfall of that first day, two hundred Persian warships had been despatched to sail down the coast, circumnavigate most of the

Eubœa Island, and come up north between that and the mainland till abreast of Chalcis, with the intention of holding the Euripus defile. Thus, it was hoped, the Greeks could be crushed between two forces if compelled to retire south, as they naturally would in the case of defeat.

The idea was all right, but, unfortunately for the Persian fleet, a heavy gale of wind sprang up that night and continued for three days. On shore it reduced the Persian army (which had concluded its march through Thessaly, and was ready for the battle of Thermopylæ) to a condition of marking time. But on sea it did irreparable damage, for it not merely burst on the main Persian fleet off the Magnesian coast, but it annihilated that detached squadron which was on its way south to the Euripus Channel. The loss of two hundred fighting ships and the upsetting of the Persian strategical idea were serious blows even for Xerxes. Presumably the gale was from the east, making it a lee shore for those galleys, and we know that four hundred triremes of the Persian main fleet were lost, in addition to a large number of the convoy, the Magnesian coast between Cape Sepias and Melibœa for forty or fifty miles being strewn with wrecks. The Greek craft, however, had withdrawn from their position at the north of Eubœa, made a fair wind of it, and sheltered at Atalante on the mainland with Eubœa to windward.

The loss of all these ships and men so suddenly had a disastrous disorganizing and depressing effect on the Persians, and considerably reduced the disparity in numbers of the rival fleets. It was now

the month of August, and there was still a great deal to be done before Athens was in sight. The land battle had not yet begun, and the Persian fleet could not pass in to succour and feed it without a battle against this Greek fleet, who had chosen their station well. Based on the north of Eubœa Island, the forces of Eurybiades and Themistocles could not be attacked by Xerxes' army: that was certain. And the narrow waters of the channel where this sea-fight must take place were tactically favourable to the smaller, but better armed, Greek fleet, because the land was a protection on either side. And now that a gale had kindly destroyed so many Persian vessels, this geographical convenience made the Persian might shrink appreciably.

But now, as the gale had moderated, the Persian fleet which had brought up along the shore near Cape Sepias in eight lines, thus stretching for several miles along the coast, shifted its position from that base to Aphetæ, further round the Magnesian heel, at the entrance to the Pagasæan gulf. This was the fifth day, reckoning the first as the day when the fleet left Therma. Three days of stormy weather were to be followed immediately by three days of battle both on land and sea. As soon as the weather had eased up, the Greek fleet had come out of Atalante and returned through the Oreos Channel, resolved that the Persian ships should not join Xerxes' army up the Malian gulf. It was in the afternoon, then, of this fifth day, that the Greeks watched the enemy's fleet shifting its base. The Greek squadrons were drawn up along the Eubœan shore at Artemisium strand, ready to

attack the enemy's flank should they try and force the channel bound for Thermopylæ. In other words, the Greeks were ready to rush forth with their rams against the Persian hulls, smashing the enemy's oars on the latter's port side, while the hoplites would get busy with their javelins and spears.

On this day, the Greeks certainly allowed the enemy to proceed to Aphetæ without any challenge, but from Artemisium across to Aphetæ on the Magnesian peninsula the strait was about seventeen miles wide, and such open water would be to the advantage of a fleet numerically superior. It was not till this evening that the Greeks learned of the sending of those two hundred ships that had been despatched and wrecked on the rock-bound coast further to the southward. Artemisium is about thirty miles from Thermopylæ, where, also, the first assault was made on this fifth day since Xerxes' fleet left Therma. But it was not till towards evening that the first Persian-Greek naval engagement took place, when two hundred and seventy-one ships advanced from the Artemisian strand and met the enemy. The Greeks drew back their wings, formed their fleet into a convex shape, and an action began. But it was indecisive, for the coming of darkness sent the rival fleets back to their respective bases like the separation of two boxers at the end of the first round. All the same, the Greeks captured fifteen of the enemy's ships.

With this superiority of nearly three to one, the Persian tactics were to surround the Greeks and crush them. On the other hand, the Greeks were

better armed, and their endeavour both in these preliminary engagements, and subsequently at Salamis, to use narrow waters and natural land protection to its fullest extent showed that what they lacked in material they possessed in brains. On the sixth day—that is, the second day after the gale—further skirmishing occurred between the two rivals, yet it was again indecisive. But the Greeks were now reinforced by the arrival of fifty-three Attic triremes who confirmed the news about the loss of those two hundred Persian ships off Eubœa.

We now come to the seventh day, or the third day after the gale. The Persian fleet so far had done nothing to assist Xerxes; it was a long time—eighteen days—since fleet and army had been in touch with one another, and, as Dr. Grundy in his 'Great Persian War' suggests, doubtless urgent messages had already been sent from Thermopylæ to Aphetæ insisting that the strait must be forced. Thus we see this day the Persian fleet assuming the offensive. Advancing from Aphetæ, they formed their line into a crescent shape with the object of encircling the Greeks, Herodotus tells us; whereupon the Greeks put out against them and engaged. But it was a fierce encounter in which the Greeks barely held their own, and the Egyptian squadron of the Persian fleet captured five Greek vessels.

Obstinate the fighting was, there were losses on both sides, though the Persians lost more than the Greeks, and when at last the fight ended indecisively both fleets were not sorry to retire to their

respective bases. According to Herodotus, the Persians had not put to sea until midday, and this almost looks as if they had not intended fighting that day except for the message which reached them from Xerxes. But now came very early that evening, solemn, portentous news, brought to the Greeks by one Abronichus in his fifty-oared galley from Thermopylæ to Artemisium. The land battle had been lost; the Persians had, on this third day of fighting, forced the pass by coming round by the hills: the Greek army was utterly and completely defeated.

A council of war was at once held, and it was decided that the Greek fleet should retire from Artemisium, since its presence there was now unnecessary. But this would need some ingenuity lest the Persian fleet should fall upon them. However, the withdrawal was made in that same skilful way that the British forces managed centuries afterwards to withdraw from Suvla Bay and evade the enemy. The Persians could still see the specks of light from the Greek sailors' camp fires that glowed and flickered long after the ships had left. The cloak of night had hidden the retreating fleet from the eyes of the Persians across the straits so effectually that when a man of Histiæa came along in a boat and informed the Persians that the Greeks were gone, no one would believe him. Some light craft were sent that night to investigate, but it was not till the rising of the sun that the Persian fleet shifted across to Artemisium, remained till midday, and then sailed to Histiæa. They could now get into close touch with the victorious Persian

army, send in supplies, and not bother about pursuing the Greek fleet, which had obtained already such a long start. In fact, it would have been entirely contrary to Xerxes' strategy that the fleet should leave his army and fight as a separate service.

Meanwhile the Greeks with the utmost despatch, but in perfect order, had departed, Themistocles with a fast division forming the rearguard. The way of their retreat was inside the island of Eubœa in sheltered waters on their way south. When they got to that narrow gate opposite Chalcis, the Platæan contingent of the fleet disembarked on the Bœotian coast in order to remove their families from the advancing enemy, and remained behind. Herodotus says that after leaving Artemisium, the Athenians begged that the Greek fleet should put into Salamis so that their wives and children might be withdrawn from Attica. The Athenians now *en masse* were transferred as refugees to Trœzen, to the island of Ægina, and to the island of Salamis.

The position, then, was this. The Persian army had broken through the barrier, and nothing could prevent it now from reaching Athens. The Persian fleet had, during those three days, fought indecisively, and the Greek fleet had withdrawn suddenly but freely. If the latter had not been able to win a victory, it was still intact, still capable of smiting with deadly effect, and able to upset all the achievements which the soldiers had won on land. We can get some idea of the speed of these oared warships when we realize that the distance from

Artemisium to Salamis is one hundred and sixty sea miles. This voyage was accomplished by the Greek fleet in a night, two whole days and another night.

The harbour of Trœzen, in Argolis, inside the island of Calauria, was used as a naval base, and here a small squadron was assembled in readiness. When, therefore, the news came that the main Greek fleet had reached Salamis, this squadron came forth to join up, and increase the fleet's numbers. The Spartan term for Commander-in-Chief of a fleet was *ναύαρχος*, though Athenian admirals retained the military term of *στρατηγοί*. Eurybiades was still the *nauarchos*, but the personality of Themistocles was to become the dominant and decisive factor in those stirring events which now were to follow. In the hour of a nation's crisis and popular panic, when advice is being scattered as freely as opinions, and the public nerves are distraught, the chance is there for a strong man of powerful individuality who calmly and clearly can sense the situation and knows his own mind as to the only right action which must be taken. That man was Themistocles, one of the greatest geniuses of Greece—a tower of strength in an emergency, a reasonable optimist when men's hearts were failing for fear. But he was more than that: he was a great strategist.

Salamis was only six or seven miles from Athens and covered an area of about thirty-five square miles. This island, separated from the mainland by a narrow channel, becomes interesting not for itself but for the reason of the restricted sea area

which it made with the Attic shore. And our immediate concern is with that eastern end of the island where a tapering peninsula, shaped like a dog's tail, narrows the channel to the width of about 1,600 yards. The Greek word for a dog's tail is *κυνόσουρα*, and that actually is the geographical name of this peninsula. Immediately to the south-east of this Cynosura was a smaller island named Psyttaleia, so that the channel was still further narrowed; that on the east being about a thousand yards, while that on the west of Psyttaleia was even smaller still. In many respects we have strategically a locality similar to that of Artemisium, but on a scale still smaller, and therefore still more favourable for a fleet that is inferior in numbers but superior in armament.

On the other hand, the geography invited that same Persian endeavour to drive the enemy round the island, and with a force waiting at the narrow western end between Megara and the island shore, thus be able to crush the Greeks as it had been hoped would have happened by the Chalcis defile of Eubœa. Thus the operations are about to take place in a narrower theatre but with greater intenseness. And this restriction bears the closest relation to the galley class of warship then employed. Whereas to-day a battle of Salamis would be unsuitable for deep-draught ships with long-range guns, and the operations would be complicated by forts and minefields and torpedoes and aerial bombs, we are in this summer of 480 B.C. able to see the whole struggle as in some compact model fashioned and restricted for our close attention.

Here, then, to the north of the Cynosura were gathered together about three hundred and seventy Greek warships, of which practically all were triremes with a few penteconters. Now, after reaching Salamis a council of war was held, Eurybiades suggesting that whosoever wished should declare his opinion. The majority were desirous of retiring to some point off the isthmus, in order that if defeat should come they could still withdraw to land in the possession of their own soldiers; whereas if the Persians overcame them at Salamis, nothing could prevent the Greeks from being blockaded. For, after his victory at Thermopylæ, Xerxes had marched south via Thebes and come upon Athens, which already had been practically evacuated. Indeed, with their numerical superiority, we may well wonder nowadays that so able a general as the Persian King failed to use his naval force to the best advantage, but his whole campaign is marked by a curious deficiency in sea strategy. If he had wished he could have employed his fleet to blockade the Greek fleet; could have held them in those narrow waters between Salamis Island and the mainland; kept them inactive and neutralized their fine armament; ruined the morale of their crews as the Grand Fleet destroyed the spirit of the High Seas Fleet when they were compelled to remain so long inside their own harbours.

And whilst the Greek fleet would have been thus made of no effect, Xerxes could have sent most deadly raids against the Peloponnesus. In some curious way, by some extraordinary lack of foresight, the Persian King allowed himself to be led

into the trap which the Greeks had prepared for him. And yet, was it more amazing than the fact that the Greeks had allowed him to advance from the borders of India even to Thermopylæ without opposition? But mistakes are not irrelative; it all depends when, and at what crisis, they are made. This error off Salamis was to be fatal for the Persians.

And yet on this Salamis island with its refugees miserable and broken-hearted at having to leave their homes, terrified lest some worse happening might befall them, the spirit was hardly that which leads to victory. Herodotus says that 'the Greeks who were at Salamis, when the news came to them how matters went with regard to the citadel of the Athenians, fell into such a panic that some of the generals did not even wait for the business in hand to be settled, but rushed on board their ships and hoisted their sails, intending to run away . . . night came on, and they, separating from the council, went on board their ships.'

Plutarch tells us that Eurybiades, who held supreme command by reason of Sparta's prestige, was unwilling to risk a battle, and it was Themistocles who urged him to remain at Salamis. It is here in this momentous crisis, when the future of Europe was so nicely suspended, that Themistocles with his great mind and moral courage was able to do the big thing. Of two kinds of bravery, moral or physical, surely the former is the noblest. To be in a minority yet plainly expound the unpleasant truth; to 'trust yourself when all men doubt you'; to attack this panic by demanding still

further efforts of resistance; to persuade men not to run but remain and fight; to expound to these timid people sound but unpopular strategy—this surely is the nature only of a big-minded, high-souled leader. Uttered with restrained oratory the following was the line of Themistocles' argument:

'It is now in your power to save Greece, if you will allow me to persuade you to remain and fight here, and do not yield to those here present who urge you to remove the fleet to the isthmus. For if you engage the enemy at the isthmus, you will be fighting in the open sea, where it is inadvisable for us to go, for the reason that our ships are heavier and fewer. Moreover, you will lose Salamis, Megara, and Ægina; for their army by land will advance with their fleet, and thus you will actually be leading it against the Peloponnesus, and will endanger the whole of Greece. But, if you will follow my advice, you will find that by fighting in the Salamis Strait with few ships against many, we shall probably win a great victory, because to us it is favourable to fight in narrow waters, whereas to fight in the open sea is to the advantage of the enemy.'

Thus, finally, Eurybiades was compelled to change his mind and yield to the plain, common sense of Themistocles' argument. The fleet would remain and fight at Salamis. Thus, too, you see that the Persian army would have to mark time until the battle had been fought. It could never, dependent as it was on the ships for its commissariat, advance to the isthmus which joined

Peloponnesus to the mainland, until the whole Persian fleet could advance, too. Thus at every step we observe what a dragging effect Xerxes' bad amphibious strategy had on the operations of his immense forces. But errors die hard, and pre-revolutionary Russia in our own time still clung to the idea that a fleet was to be used as a wing of the army. Surely, no one who has studied the operations leading up to the battle of Salamis could ever excuse himself for falling into such an error again?

Before we come to the actual battle we must say a word about our sources of knowledge. So far we have drawn very largely from Herodotus, who on the whole is clear and easy to follow, if a little incoherent at times, especially in his details with regard to the crossing of the army at the Dardanelles. The father of history, he lived in an age when the true critical historical sense was not yet developed. To-day we regard history as something more than propaganda or biassed presentation of facts twisted to drive home a lesson; something, too, more than mere narrative without weighing evidence and sifting the essential from the accidental. But the central idea in the mind of Herodotus was less that of presenting truth of events than to show forth the enmity of Heaven against certain persons. Thus, in places, he is glaringly inaccurate, though, on the whole, reliable. Modern criticism and research, correcting his mistakes from more reasonable evidence of greater reliability, have enabled us, however, to get a pretty true picture of the past.

The point is stressed at this stage, because in the details of the Salamis battle we have to use Herodotus with caution. 'The historians of the last generation,' says Dr. G. B. Grundy,* 'do not seem to have recognized that the details of the battle, as given by Herodotus, present any difficulty of a serious character.' In fact, these details are not in agreement with the evidence afforded by Æschylus, the great Athenian tragic poet. Whom, then, shall we believe; which of the two shall we accept as the more trustworthy for the story of this battle? The answer is that Æschylus (525-456 B.C.) actually took part in the fight at Salamis: he was a combatant in the Greek fleet. Modern authority regards his authority in this respect as superior. With this proviso we may now resume.

We left the Persian fleet at the northern end of the island of Eubœa, and it will not be forgotten how necessary to these oared craft was a land base where the vessels could be repaired after being injured by the gale and the fighting. There was plenty to do refitting the ships, taking supplies to the Persian army, resting the rowers, and tending the sick. Before the advance could be continued, it was essential that ships and men should be in a state of efficiency, for the southerly voyage must end sooner or later in a fierce fight against the undefeated Greek fleet. It was not till three days after the army had left Thermopylæ that the Persian fleet left their base, and the passage to Phaleron Bay took three days. About three and a half miles from Athens, Phaleron was a port of

* 'The Great Persian War,' by G. B. Grundy. London, 1901, p. 369.

Athens until about the year 475 B.C., when Themistocles persuaded the Athenians of the superior possibilities of the Piræus.

Herodotus tells us that Xerxes now went down to his ships at Phaleron to obtain the opinions of the admirals and despots, and questioned them individually whether he should attempt a battle by sea. All were in favour of this attack, with the exception of Artemisia, who opposed the idea. It seems strange to us that a woman should be a naval officer, and that her opinion should be invited on a matter of this kind, but, as we shall see in the next chapter, the incident was to occur again. Artemisia was Queen of Halicarnassus, the birthplace of Herodotus, and, as a vassal of Xerxes, she had come with this expedition, and was to fight at Salamis. That her squadron was not useless is proved by its work during those three days' fighting off Artemisium, for this woman's ships swooped down on a Greek scouting galley, captured it, and the captain was killed by having his throat cut.

But perhaps the lady's nerves had now begun to weaken by the long voyaging and the possibility of the fierceness of the impending fight. At any rate, she was all against the advice of the others. 'Spare your ships,' she begged Xerxes, 'and fight no battle on sea; for the enemy's men are as much better than your men on sea as men are than women.' However, the Persian King preferred the advice of the majority, 'being of the opinion that they had been purposely slack off Eubœa because he himself had not been present, but now he made preparations to have them under his own eyes as they fought.'

The distance from Phaleron Bay to Salamis is less than three miles. With their fleet of about 370 ships, manned by about 80,000 men, the Greeks were ready at the eastern end of Salamis Strait, while the Persian fleet of probably 600 to 700 ships and 120,000 rowers and marines was preparing for battle. On what was probably the nineteenth of September, there happened at sunrise an earthquake which was felt both on land and sea. To some superstitious minds this was a bad omen. But Themistocles it was who did the bold thing, and with firm resolution and no little cunning managed that afternoon to send by a man in a boat a message to Xerxes, saying that the Greeks were planning a retreat, and that now was the Persian King's chance. Xerxes swallowed the whole of the bait, and ordered his fleet to put to sea after nightfall. The instructions to his officers were twofold: to form the ships into three lines and guard the eastern exit from Salamis Strait, and to cut off their retreat should the Greeks come out at the western end of the island where the channel contracts abreast of Megara. Admiral Sir Reginald Custance interprets these three lines at the eastern exit as consisting of—first, an advanced line of look-out ships; secondly, detachments in support; with, thirdly, the main fleet backing them up. It was part of the plan, also, to occupy the island of Psyttaleia with Persian troops, in order to save such Persians and destroy such Greeks as might be driven there ashore by the battle.

According to Æschylus, the first movement of this vast Persian fleet took place on this night, and

shortly before dawn (September 20) the movements were completed, Xerxes' three lines of ships being across to the southward of Psyttaleia, blocking both channels on either side of that island. To block the western end of Salamis Island by Megara, the Persian King had sent a detachment of two hundred Egyptian ships. That would leave about five hundred at the eastern end, and thus the Greeks would be between a pair of pincers or giant claws, to be squeezed into destruction. It was the only way in which Xerxes could employ his overwhelming force in a locality which the Greeks had themselves chosen, and into which Themistocles had hurried him. Herodotus tells us that these Persian night-operations were carried out in silence and without anyone taking sleep. So much, then, for the Persian plans. Now let us visit the Greeks.

We know that the Greek position had been deliberately chosen because of its confined waters. 'The principle,' says Admiral Custance,* 'put into practice at Salamis, of limiting the movements of a hostile fleet by taking up a position of flanking its advance is of first-rate importance, and has been often applied since that battle,' as, for instance, in the case of the Armada Campaign, 1588, off Port Arthur, 1904, Tsushima, 1905. But we also know that the sudden, silent movement of the Persians over those few intervening miles did surprise the Greeks, who had no idea that it was already completed, or even begun. As a fact, during the

* 'War at Sea,' by Admiral Sir Reginald Custance, G.C.B., K.C.M.G., C.V.O. Edinburgh, 1919.

earlier part of that night the Greek senior officers were still wrangling when the tidings reached them that the Persians approached. This did not convince the council, and then there arrived a trireme which had deserted from the enemy, and confirmed the information beyond all doubt. There was something dramatic about this messenger's arrival, and the time for arguing had now passed: the great hour was at hand. They must fight.

Herodotus says that just as the day was dawning the admirals called together their sailors, and Themistocles addressed them in an eloquent speech and bade them go aboard their ships. It would seem from Herodotus* that the Greek ships were afloat, at anchor, and not hauled up on the beach. This is naturally what we should expect in the circumstances. Now if we would try to reconstruct the picture on which the sun that day rose, we must consider what a tremendous line of battleships, dense and extensive, that certainly was. Granted that the strait north of the Cynosura is less than 2,000 yards wide, that there were about three hundred and seventy Greek galleys, that each was about 150 feet long, that they were about 18 feet in beam, that the length of their oars was 20 or 30 feet, and ample room must be left to prevent the oars of one vessel fouling those of her next abreast; it must be obvious that this fleet extended to not more than about fifteen ships in line-abreast, and about twenty-five lines deep. Thus we get a four-sided figure of shipping nearly 2,000 yards wide, and (if we allow one ship's length

* Book VIII. 56, 58.

between each line) about 2,500 yards deep. Reckoning in twenty-five columns single line-ahead, it comes to the same thing. The effect of thus filling up the strait with galleys was that the Persians must make a frontal and not a flank attack; in other words, only the leading craft could attack, and then the second line, the third line, and so on. Surrounding tactics were impossible.

With their oars smiting the deep blue water furiously, this tremendous mass of warlike craft, gilded by the rising sun like so many gigantic water-beetles, contrasted with the brilliant reds and browns of the Salamis hills and the green pine woods of Mount Ægaleos on the Attic shore. It was a sight for men and gods in that morning air as the Greeks moved out to take up their position, and almost simultaneously the two fleets moved forward and became observed of each other for the first time since Artemisium. Eight hundred and seventy craft in view at one time, and another two hundred only seventeen miles to the westward—a total of over a thousand ships. 'The scene,' says a modern historian,* 'as the two great fleets advanced towards one another, must have been one of the most magnificent that the world has ever beheld. History can hardly present a parallel of a naval battle on such a scale as Salamis, and none in which fleets so large have operated in so comparatively confined a space.' Before that rising sun should set, the momentous battle for the command of the Mediterranean, for the command of Europe, the destiny of the world, must be decided between the

* Dr. G. B. Grundy, *ut supra*.

East and the West. And from this shock the East went staggering back.

The difficulty for the Persians was to compress their formation so that they could get their enormous force through the still narrower channel at the eastern side of Psyttaleia, where it is not more than a thousand yards wide. Here they were compelled to reduce from three broad shallow lines into probably nine single deep columns: they had to reduce their front and wheel to the left through about four points of the compass. A squadron had been sent round the west side of Psyttaleia in order to prevent the Greeks from escaping that way. And it has been suggested that this squadron on emerging got mixed up with the main fleet. At any rate, we know that there was great confusion. Æschylus says that the Persian ships fell foul of each other when they came to the Narrows. Compelled in their progress to withdraw some ships from their line, the Persians were caught at a disadvantage by the Greeks, who in good order, but their right wing the more advanced, came charging with their beaks into this unfortunate struggling confusion.

From now on there is but little tactical interest in the battle which became a mere land fight enacted at sea. There was no room to manœuvre, and the contest resolved itself into one terrific mêlée, in which ships rammed each other and the men fought hand to hand; but the superior Greek armament of the hoplites was able to tell advantageously. It was thus that the two forces met on equal terms, for if the Persians were even still

stronger in numbers, the weapons against them were weightier. The actual point of contact was probably just to the north-east end of Cynosura, and the first hostilities took place between the Persian right and the Greek left. Plutarch affirms that the battle went on till evening when the Greeks won what he calls 'the greatest exploit ever achieved at sea.'

There is something in this fight which differs from most of the world's battles by sea in that it was witnessed by large crowds as if it were some all-important game. On the Salamis Island were those panic-stricken refugees, whose entire future and freedom depended on the result of that contest. On the Attic shore, by the slope of Mount Ægaleos, was Xerxes, who had come victoriously from the other end of Asia, and was now watching with eager eyes that climax of his expedition. 'Here,' says Plutarch, 'he sat upon his golden throne with many scribes standing near, whose duty it was to write down the incidents of the fight.' This same authority gives the interesting statement that Themistocles would not bring his triremes into line-of-battle before the fresh wind set in off the sea, as is usual in the morning. This morning wind is even in this twentieth century well known hereabouts, beginning suddenly before 7 a.m., blowing hard from the west, but ending two hours later in a flat calm, causing a nasty sea in the strait.

'This,' he goes on to say, 'did not damage the low flat ships of the Greeks, but it caught the high-sterned Persian ships, overweighted as they were with lofty decks, and presented their broadsides to the Greeks, who eagerly attacked them.' He

describes how one ship crashed into the other, stem to stem, with its iron beak, and was torn open in the fray. Darts and arrows poured forth, and boarding was then attempted by the Greek vessel, but this was frustrated by Persian spears. In this battle, there were instances when one ship came furiously along down the other's side, smashed the enemy's oars, left her temporarily unmanageable, and in the meanwhile rammed her unprotected hull. Boarding could quickly follow, when eighteen marines, fourteen hoplites, and four bowmen were ready to complete the job.

Herodotus mentions another incident in which that Queen Artemisia made herself somewhat notorious. It was while the Persian fleet was in a state of confusion that her own vessel was being pursued by one of the Greek craft, and was scarcely able to escape, inasmuch as in front of her were other Persian ships, while hers was exposed to the enemy. She then committed that criminal offence of sinking one of her own side, and by ramming. Whether this act of feminine folly was intentional, or because Artemisia lost her head in the excitement, we know not. Xerxes, from the hill, saw it all, and actually believed that Artemisia had rammed one of the enemy! The woman got away.

Really, the turning-point in that long Salamis battle occurred right at the beginning, when the Persian fleet had muddled its manœuvring; from that point, victory was certain for the Greeks if they could keep on. It was merely a question of ramming so many ships and slaughtering so many men as long as the light lasted, but they had the

whole of a September day. The lesson of efficient handling of fleets is therefore obvious. Seamanship may win or lose a fight. What actually happened was that the front ranks became telescoped. They were being pressed from the rear by their own columns and from the van by the enemy, and the more the van was forced back, so much greater became the confusion. Finally, some of those ships in the Persian rear retreated to the south of Psyttaleia, since they were unable to get through to the fighting at the van. True, the Persian centre at first resisted stubbornly the enemy, but, like a heavy gale laying low a cornfield, the wave of victory came sweeping along from left to right for the Greeks. By the late afternoon it was all over.

Finally, the Persian fleet, once so gigantic in numbers, of which so much had been expected, had to withdraw. Its Commander-in-Chief, Ariamnes, brother of Xerxes, had been killed early in the fight. They had lost, too, a couple of hundred ships against the Greek forty. On both sides were large losses of men, but many Greeks escaped from their sinking ships by swimming to Salamis. It is a matter for criticism that the Greeks did not pursue the enemy beyond Psyttaleia, and allowed them to retire to Phaleron Bay while they themselves went back to Salamis. A Nelson* would have felt that this was duty only partially done.

* After the *Ça Ira* and *Censeur* and other French ships had struck, 'Now,' said Nelson, 'had we taken ten sail, and allowed the eleventh to escape when it had been possible to have got her, I could never have called it well done.' (Southey's 'Life of Nelson.')

But the Æginetans, on seeing the Persians turn to flee, did gallantly place themselves in their way and perform deeds of valour. When once the ships of Xerxes had gone, soldiers were transported in boats across from the Salamis Island to Psyttaleia and slew the Persian garrison which had been landed there.

If the victory on the Greek side was due technically to choice of site, to tactical advantages, and superior armament; if the loss on the part of the Persians was owing to bad strategy and worse manœuvring in the face of the enemy, yet we must not forget that the spirit of a nation or nations which have been invaded is something that is hard to break. There was a lofty cause at the back of every man who rowed or fought in Greek ships that day, and there were those women and children refugees before their very eyes on the island to remind them. Salamis was the last hope: if they should not fight and vanquish that day, they never would. But now the Greeks had achieved their aim at length, and before long they would be able to return to Athens and their homes.

As for that Persian fleet which had allowed itself to be beaten in the presence of its own King, it went back into Phaleron Bay, there to be under the protection of the Persian army which had so signally distinguished itself. One might admit freely that Xerxes' fleet had kept his army fed all that way from the Dardanelles; but even at Artemisium it had not achieved any good thing, while at Salamis it had brought to sudden and complete disaster the whole of its King's invasion

strategy and wiped out the Thermopylæ victory. We have dealt with this campaign very fully because it is to any naval nation of the most vital interest. Never could we wish for a better illustration of the value of sea-power, which Themistocles had such difficulty in expounding.

Salamis in one short day decided a whole war that had taken years in its preparation: for what followed? The Persians had lost command of the sea, the very size of the army became a peril to itself. The victualling ships could not be protected, Greece was too poor a country to feed all these thousands of men. There was nothing for it but to retreat as soon as possible; and this is what happened. Within a few days after Salamis that disappointed army began its homeward trek, and the Persian fleet made off to get across the Ægean as quickly as it could. The Greeks followed in a belated pursuit, but did not proceed beyond the island of Andros. Even the Athos canal was never reopened.

CHAPTER II

BATTLE OF ACTIUM, 31 B.C.

PLUTARCH says that the soul of a lover dwells in another person's body. In this story of the events leading up to the battle of Actium, in the very catastrophe which ruined that sea-fight, we shall watch the mind and body of a great man bereft of his animating spirit through the foolish fascination for a woman. Shakespeare neatly sums up this prominent personage as 'the triple pillar of the world transform'd into a strumpet's fool.' It is the instance again, so often in history, where the worst kind of corruption is that of the good man. For Antonius both possessed and exercised great qualities, and we shall miss an important point if we fail to get that fact quite clear from the first: only thus can we appreciate the real tragedy of this very human drama.

That is the underlying interest of Actium. It is not merely a battle by sea, nor only the expression of rival policies, nor an isolated study in tactics. At least one modern Italian historian has taken the view that Actium should be removed from the world's list of great naval battles on the ground that it was only a feint. A distinguished French admiral regarded it as a strategical retreat in order to carry the war from Europe into Asia. No one can deny that the results of the battle were

historic—that, like Salamis, it was a victory to settle the struggle between Orientalism and the Latin tradition.

Not merely had Cleopatra stolen the soul of Antonius, but enslaved his common sense, destroyed his strategical insight and ruined his outlook on life. Easy was his descent from so high a pinnacle as he once occupied. Brave, yet undiscerning, a good fighter, but unable to see far ahead, a weak sensualist, he chose, by gradually yielding to the base side of his character, to throw away greatness, to desert his own fleet in the hour of its trial, and as a result to lose an empire. Suicide was the final act in this pathetic life. How different might have been political history but for this one man's folly! 'Had not the fatal Egyptian policy profoundly disturbed Antony's strategy,' says Ferrero,* 'it is improbable that Agrippa's name would now appear upon the pediment of the Pantheon or that Cæsar would now be an imperial title.'

It would be hard to find naval warfare so closely concerned with personal characteristics as in the subject of this chapter, and if we leave out the strong human interest we do not understand how or why things happened as they did. And if we cannot keep out the love story, at least we can see it presenting the lesson that strategy and romance, politics and sexual passion, are ill-assorted couples, and better kept apart. Plutarch observes that in taking Fulvia for his wife Antony had chosen a

* 'The Greatness and Decline of Rome,' vol. iv., by Guglielmo Ferrero. London, 1908.

woman whose concern was not about domestic industry or housekeeping: Fulvia's wish was to rule a ruler and command a general. Thus Cleopatra was to be indebted to Fulvia for having trained Antonius to woman-rule, so that he came to her already tamed and disciplined to feminine autocracy.

Marcus Antonius was born about 83 B.C., and passed through land wars, political crises, victories and defeats, friendships and intrigues, until we see him reconciled to Octavianus, and become one of the triumvirate. In 42 B.C. the triumvirs, owing chiefly to Antonius, defeated Brutus and Cassius at Philippi, and Antonius proceeding into Asia, collecting supplies for the Parthian war, he sent orders to Cleopatra that she should meet him in Cilicia to answer certain charges of having supplied Cassius with money for the war.

Cleopatra, who had been born in 68 B.C., well knew the value and power of feminine artfulness and charm. At the age of twenty she had won the affection and admiration of Julius Cæsar, who made her Queen of Egypt. An undoubtedly clever woman, she was possessed of ideas so big as to make her a megalomaniac. Pride and avarice were her guiding motives in life; physical attractiveness, cunning and trickery, bribes and flatteries, the luring, soothing appeal through the senses, were her methods. Magnificent in her displays, well able to stage herself in the most suitable setting, strong-minded, sophisticated, obstinate, determined, brooking no opposition, she allowed no power, divine or human, political or private principle, to

interfere with her ambition if in the least possible of gratification.

Conscious of her powers of fascination, with big schemes of empire, she used men as tools to carve her destiny. Even Antonius was merely that in his lifetime, and on his death she was instantly endeavouring to fascinate Octavianus to preserve her rule and freedom. Of pure Macedonian descent, this dark, beautiful woman, now in her twenty-eighth year, set out in her vessel, and crossed the Mediterranean to reach the Cilician coast. We can picture sweet-lined Egyptian craft, with curved stern and overhanging bows, their single square-sail and oarsmen slaves, the steering oar on the quarter and the regal cabin right aft, setting out from Alexandria, and rolling over the sea till the Sarpedon promontory was sighted, and then sailing up the River Cydnus to Tarsus, where Antonius was waiting. Many letters of summons had he sent her, but now, much as she despised him, she had come but to mock and to fascinate with her undoubted charm. Thus, with her cargo of many costly presents, of money and ornaments, and everything well arranged for dramatic effect, we see her brazen in her brilliant beauty in the stern of this Egyptian ship coming up the Cydnus. Look at the magnificence of her craft, with its gilded stern and purple sail, and the rowers working at the silver oars that flash in the sunlight, keeping time to the sound of a flute in harmony with pipes and lutes. Reclining majestically, most gloriously attractive, under an awning spangled with gold, fanned by youths on either side, this is how the

unpenitent Queen came up the stream, deliberately intent on winning her own victory in her own way. And no one could deny the effectiveness of her arrival.

Shakespeare, who knew his Plutarch, has by a wonderful word arrangement conveyed the real colour of this stately arrival in the following passage, once described by Robert Louis Stevenson as 'exceptional, indeed, in literature,' 'a monument of curious ingenuity':

> 'The barge she sat in, like a burnish'd throne,
> Burn'd on the water: the poop was beaten gold;
> Purple the sails, and so perfumèd that
> The winds were love-sick with them; th' oars were silver,
> Which to the tune of flutes kept stroke and made
> The water which they beat to follow faster,
> As amorous of their strokes.'

It was the year 41 B.C. Antonius was now about forty-two, and was about to receive this ambitious, wilful Queen. He sent her an invitation for supper, but it was characteristic of her that she preferred that he should come to her; and he came. The narrative of the future lives of these two is now nearly two thousand years old, and yet in essentials it is the story which comes before the judges of our law courts regularly and annually; it is the very kind of material out of which our plays and novels so frequently are made.

Cleopatra triumphed from the first. A clever hostess, a good talker, a woman who understood men, she hypnotized him by her luxury and personality, her beauty and sweet voice, and henceforth his life was hers. Thus, while Fulvia and

the brother of Antonius were carrying on war in his interests against Octavius in Rome, Antonius allowed himself to be lured by her to Alexandria, where, forgetful of principles or duty or anything else, he wasted his time in prodigality.

This went on for some months, but towards the end of 40 B.C. Antonius managed to pull himself together, and from Alexandria he sailed to Tyrus in Phœnicia, and thence by way of Cyprus and Rhodes to Athens. For the capture of Perusia had decided the war favourably for Octavianus, and from Brundusium Fulvia had fled to Athens. Antonius now threatened Octavianus, and leaving Fulvia sick at Sikon, without bidding her good-bye, crossed from Corcyra (Corfu) into Italy. 'Like a man roused from sleep and a drunken debauch,' as Plutarch puts it, Antonius had left Alexandria, and it had been Fulvia's hope that she might win him back to her from the attractions of Cleopatra. But now Fulvia, exhausted by vexation and disease, died.

Fulvia's death made a great difference, and on reaching Brundusium Antonius came to terms with Octavianus and a reconciliation was effected, the western half of the Empire being apportioned to the latter, while Antonius received that half of the Roman world which lay to the east of the Adriatic. Now Octavianus had a half-sister named Octavia, a widow, a woman of great beauty and sterling character, whose sound influence for some years was able to keep Octavianus and Antonius at peace; for she now married him, since Fulvia was dead. But in 37 B.C. Antonius, who had been away

for some time, sailed to Italy, irritated against Octavianus, and with a fleet of three hundred craft anchored at Tarentum. Octavia, however, became the peacemaker, went to her brother, and by her entreaties reconciliation was again made between her husband and the ruler of the western world.

Leaving Octavia behind in the keeping of her brother, we see Antonius crossing with his fleet to Syria, and as he came south that dormant passion for Cleopatra was revived. Already she had borne him twin children, and now he finally sent for her and to Syria she came. On her arrival he bestowed on this ambitious woman both Cyprus and other territories, which caused considerable scandal and indignation when the news reached Rome. But now Antonius begins his downgrade to the depths whither he was bound. He was to invade Parthia with little success, having temporarily sent Cleopatra back to Egypt. But after he had marched back to the Syrian coast north of Sidon from that territory south-east of the Caspian Sea he had already lost by disease and battle thirty-two thousand men, although he had defeated the Parthians in eighteen engagements.

Arrived at the Mediterranean coast, he sent for Cleopatra, who was a considerable time in appearing, and in the meantime Antonius indulged in drunkenness. But matters were fast working towards the inevitable. Octavia the faithful spouse was anxious to join her husband, and came from Rome as far as Athens, where she received letters from Antonius telling her, to her annoyance, not to proceed further. Cleopatra, jealous of the other woman,

now demonstrated the depth of her affection, and went with her lover back to Alexandria.

On the return of Octavia from Athens trouble began to ripen. Octavianus rightly considered that his sister had been insulted. In Rome Antonius was hated, and his brother-in-law was exciting the people against him. Not merely had Antonius been guilty of family delinquency, but he had given up his Roman citizenship and appeared by the side of Cleopatra as an Eastern despot. This was a national insult: Rome was angered and disgusted. Nor did Antonius hesitate to send recriminations against Octavianus, and thus it was clear enough that hostilities would soon break out.

We therefore observe Antonius with Cleopatra proceeding to Ephesus, where he began to collect from all parts a fleet of eight hundred ships, including two hundred Egyptian craft provided by the Egyptian Queen. During the months of March and April, 32 B.C., whilst Antonius was in Ephesus, Roman senators had been disgusted to find Cleopatra there, but she had managed to remain. It was in that same year, too, that she had urged Antonius to issue letters of divorce against Octavia, and in the following May or June that divorce had taken place. This was the final rupture between Antonius and Octavianus, and Cleopatra had brought it about, but she had feared Octavia's powers of reconciliation: it was for that reason that the Queen refused to obey the wishes of Antonius that she should sail now to Egypt and there await the result of the war.

That was not Cleopatra's idea at all. She was

jealous, nervous, suspicious; but, above all, she was ambitious and avaricious. Antonius presently sent persons to Rome in order to eject Octavia from his house, but that did not satisfy the Queen. He was a man without a will so far as she was concerned: she possessed his soul and motive power; she was a dangerous match which would presently touch off the explosion. He wanted her to go: she remained to ruin her lover at a time when he most required to be left alone. So at first they sailed across to Samos Island, where they spent some time in feasting, and thence they went west to Athens. The rapidity of the military preparations and size of Antonius' fleet alarmed Octavianus. The war was going to be something more than a women's quarrel over a man: it was now assuming great proportions judging by the preliminaries. And when counter preparations had been made, Octavianus got a vote passed for war against Cleopatra and for depriving Antonius of the authority he had surrendered to her.

Well off as regards funds, with a numerous fleet which contained many big craft rowed by eight or ten men to an oar; with an army consisting of 100,000 infantry and 12,000 horsemen, this leader, whose dominions extended from Illyria to the Euphrates, spent the winter with his army in Greece. What were his plans? Well, it would be better to ask what were Cleopatra's? He had a great superiority in land forces, but it was the whim of this woman that the decision should be made by the navy: that the fight should take place on sea, and so of course it had to be. The

strength of Octavianus was to be 250 ships, 80,000 infantry and 12,000 horsemen. Victory should, therefore, not belong to Octavianus, except for some act of folly.

It was part of Antonius' intention to station his main fighting fleet in the Ambracian gulf. This is on the west coast of Greece between Corcyra and Leucas, the entrance being through a narrow strait passing Actium on the port hand. Inside, the gulf widens out to ten miles, but the dangers restrict the available channel to about two miles. The gulf has a length of nearly nineteen miles, and forms a kind of inland sea. To-day the strait at its narrowest has a current of two and three-quarter miles, changing usually every six hours though variable. The bar is of sand, gravel, and seaweed, but there are from 8 to 12 feet at the entrance, as Greek torpedo craft found when they forced their way into this gulf during the war with Turkey in 1912. The northern shore of the gulf is mostly flat and marshy, but the southern is steep-to. Three miles north of the narrow strait are still to be seen the scattered ruins of Nikopolis, the city founded after this battle by Octavianus in commemoration.

This fleet was to prevent a landing by the enemy in the following spring. Outposts were stationed at Corcyra, but that winter, towards the end of 32 B.C., Octavianus sent a small fleet to the coast of Epirus in order to find a suitable landing. This was further up the coast, and to the north of Corcyra, near to the Acroceraunians, and here in the following year Octavianus' army did disembark. Actually

this is the modern Valona Bay, so eminently suitable for such a purpose. And, indeed, this was the bay where, during the Great War of 1914-1918, troops were landed from Italy, and British drifters operated with their anti-submarine nets.

During this winter of 32-31 B.C. the fleet remained in the Ambracian gulf, but such were the famine and disease that one-third of the crews perished, so that (as we know from Plutarch and Dio) Antonius ordered the trierarchs, or ship captains, to seize travellers, ass-drivers, reapers, and youths to man these craft. In the meanwhile he himself was wintering with Cleopatra at Patræ (Patras) further south. When spring came Antonius made no move, but the fleet of Octavianus—well-manned, not heavy but mobile—crossed the seventy odd miles over the Ionian Sea, and landed his army on the coast of Epirus. Fleet and army then came rapidly south, seizing the island of Corcyra, and on the mainland Torone. Using Corcyra as a naval base, Octavius made excursions against Actium, but no one came out to meet him.

Antonius now realized that Octavianus was intending to destroy the fleet in the Ambracian gulf, so now hurried to Actium, on the southern shore, and reached there simultaneously with the arrival of Octavianus' army, entrenched on the north promontory of the gulf. In the meantime the latter's fleet, under the admiralship of Agrippa, had made a feint on Southern Greece, which at first caused Antonius to believe that a landing was intended on the south and not on the west, but the southern advance of Octavianus through Epirus

showed the main idea. Dio, the Roman historian, who was born about A.D. 160, says that Octavianus occupied the site where Nikopolis 'stands,' and took up a position on high ground where he could view the outer sea and the Ambracian gulf. He fortified this spot, and thus commanded Actium on the southern shore, 'watching it from above with his army and blockading it with his fleet.' Dio also gives the legend that Octavianus transported his triremes from the Ionian Sea into the gulf by hauling them across the promontory by way of the fortifications, 'using newly flayed hides smeared with olive oil' as runways. Having regard to the fact that these craft were normally hauled ashore at night, there can be nothing improbable in the legend, especially as there were ample numbers of men to do the actual hauling.

The forces of Antonius had occupied the entrance to this gulf in advance, erecting towers on each side of the strait, stationing ships at intervals over the intervening water. The men had been encamped on the east side of the strait, and found it, as we have mentioned, very unhealthy. There were various raids against the ships of Antonius, and a number of transports were carried off from time to time. But the advance of Octavianus' fleet had been stemmed at the last moment, when Antonius suddenly arrived from the south, by resort to stratagem. For the latter had armed the oarsmen and placed them on the decks to make a great show of strength, keeping his ships on each side in the channel near Actium, prow to prow, as if ready for fight. This so impressed Octavianus that he

desisted from a contest by sea. Instead of this he would fight on land, but the concentration of his enemy's army from various parts of Greece was not complete, so Antonius kept deferring a big engagement by a series of skirmishes. Finally the latter established an enormous camp at Actium and strengthened the fortification of the entrance at the straits.

We are now in May, 31 B.C. Agrippa's fleet had been recalled, so that the whole naval force might be concentrated against Antonius, and so we see the two rivals in strength now adjacent to each other, ready for battle, and yet each side seems strangely reluctant to take the offensive. During March Agrippa had been also seeking out the corn-ships bound from Asia to Egypt, whilst Octavianus had anchored in the Gulf of Comaro. The position in May was that he had fortified his camp till it was practically impregnable, his line of communication to the sea at the port of Comaro was protected by high walls, and to this port his transports could continue fetching corn from Italy and from the islands of Corcyra and Leucas, which had been captured. Thus there was no question of starvation, and this neutrality of activity might apparently continue for ever.

But everyone, especially if he served through those monotonous months of the recent Great War, knows the baneful effect on men's minds of a condition of stalemate. The time comes when it is almost unbearable, when there must be something to break up this state. Such a crisis was approaching at Actium. The army of Antonius was

dejected, sickness in that hot summer weather was prevalent, Cleopatra was becoming alarmed lest she should be stricken with fever, Antonius was rapidly losing all enthusiasm for the campaign. By July he was seriously contemplating abandonment of the war, and going off with Cleopatra back to Egypt. He was now fifty-two years of age, but his debaucheries had made him older than his years, and his old fighting spirit was gone. He was apathetic now, like his men.

True, there were small incidents of fighting, and, to the north, Antonius had transferred part of his army so as to threaten the enemy's camp. But this amounted to nothing, and so we actually reach that pathetic stage when Cleopatra's lover finally resolved to retreat at all costs. There should be a battle afloat, certainly, if it could not be avoided, but the main idea was to get away from this Ambracian gulf to Egypt. Part of the army was to be put aboard these ships, which were to go forth in battle order and attack if the enemy advanced, fight their way through, and thus reach Alexandria. The plan was put before Antonius' generals, who were amazed, and at once appreciated that this suggestion had originated from Cleopatra. There was some plain speaking, and it was even intimated to him that, if the Queen had not the courage to continue the war, Antonius had better send her back to Egypt. It was a pretty desperate condition of affairs when the Commander-in-Chief had to be told the truth in this fashion, and, finally, he was compelled to drop the idea—yet only for a while. And now we are in the month of August.

Deserters had brought information to Octavianus that Antonius was intending to attack with his fleet, so the former kept his ships for the present in Comaro. But it is quite clear that Cleopatra was now so frightened of this malaria camp, so insistent to get away, that she worried her lover into deciding on the plan he had already rejected. It is pitiable to see such an experienced campaigner, such an experienced veteran, harassed and hectored by this female into such a fatal decision, and there can be no doubt but that he was afterwards to suffer the pangs of shame.

However, orders were now issued that this battle of Actium was to be fought on August 29, and five days before the battle Antonius embarked 22,000 soldiers on board 170 warships, or about 130 a ship, the crews being already complete. We have, in the previous chapter, explained that, before going into battle, these triremes always put ashore their larger sails and masts: the craft required to be as light as possible so as to manœuvre readily. Judge, then, of the amazement when the officers were told to take with them into this fight their heavy spars and sails. Antonius had to invent the lie that the object was for pursuing the enemy. He now went a step further and burnt all the Egyptian ships, with the exception of the sixty best. But stealthily by night all the most valuable possessions of Antonius and Cleopatra were carried aboard by faithful slaves.

All was now ready for this shameful adventure, but for four days it blew so hard that the gulf was too agitated for a fight. On September 2, however,

there was no wind, the sea quite calm, so there was no impediment, and the famous battle was to take place. Octavianus had been amazed to learn from deserters that Antonius and Cleopatra had no intention of fighting a serious battle, but were intending this to serve as an opportunity for flight. He therefore summoned a council of war on September 1, and proposed that the escape of Antonius should be allowed, but Agrippa advised that this should be thwarted, yet eventually Octavianus agreed, and this day ordered eight legions and five pretorian cohorts to embark in readiness.

So it was that as the wind and sea were dying down, Agrippa took his fleet out the following morning, took up a position three-quarters of a mile from the exit of the channel, the fleet being divided into three squadrons, Agrippa himself being on the left in command, Octavianus being on the right. Now, long before this date, Antonius and Octavianus had exchanged boastful messages, and next, before the battle, Antonius made a hoodwinking speech to his soldiers, bragging and overconfident in tone. 'As for their ships,' he referred to the enemy, 'they will not even be able to sail out against us at all. For you, yourselves, of course, see the length and beam of our vessels,' which, he suggested, could not be damaged either by the enemy's charging bows-on, or by ramming 'our' sides, owing to the thickness of 'our' timber and the height of 'our' ships. Besides, of the 22,000 heavy-armed soldiers, 2,000 were bowmen who would keep off the boarders.

Having made this speech, Antonius sent aboard his archers, his slingers, and the heavy-armed troops. It is to be noted that his fighting ships were much higher out of the water, of greater freeboard, than those of the enemy. This had both its advantages and its defects. Certainly in close fighting it did mean a better platform from which to attack the men in the low-lying galleys; but it had the disadvantage of less mobility, and the ship was a bigger target for the enemy's rams. Of triremes, Antonius had but a few, relying chiefly on the larger tetraremes and dekaremes. (This is not the place to discuss the old question as to whether we are to consider these craft as consisting of three, four, or ten banks of oars. For myself, I prefer to regard them as rowed by three, four, or ten men to each oar. The Mediterranean galley type remained most conservatively undeveloped even down to the sixteenth century A.D., and of that period there is plenty of pictorial evidence showing five or six men to every oar.)

The seamanship in these olden days of fighting belonged to the masters of the vessels. In battle the only real seafaring art consisted in careful steering and seeing that the men pulled at their oars; approaching or leaving the sphere of action there was a little more seamanship required in setting and trimming sail. But we must not forget that the Commanders-in-Chief and admirals were amphibious. They were warriors and not sailors. To-day they controlled troops ashore: to-morrow they directed those same men afloat. It was the same thing at the battle of Lepanto in the six-

teenth century: it was the same thing in the time of the Commonwealth. For the cleavage between the land- and sea-fighting services is comparatively modern as we look at history as a whole. And in this battle of Actium we have a perfect expression of that idea which regarded a naval engagement as tactically similar to a contest fought out ashore. In the ships of Antonius were built lofty towers as he had erected them on land, and this castellated arrangement was to influence ship design even down to Tudor times.

Octavianus, in haranguing his men before the battle, reminded them that Antonius' followers knew better how to row (*ἐρέττειν*) than to fight afloat (*ναύμαχειν*), and warned them not to think that the size of their bowl-like hulls (*σκάφων*) or the thickness of their wood was a match 'for our valour.' 'What ship,' he asked, 'ever by itself either wounded or killed anybody? Will they not by their very height and staunchness be more difficult to move and less obedient to their steersmen? Of what use can they possibly be to the fighting men on board them when these men can employ neither frontal assault nor flank attack, manœuvres which you know are essential in naval contests?'

Octavianus had, of course, put his finger on the essential point. The primary aim of galley tactics was, as we have seen, to make a flank attack at the enemy's line, as was the aim at Artemisium. If that were not possible, then frontal attack had to be sought, as at Salamis. It was knowledge common both to Octavianus and Antonius that the latter's men were in a state of discouragement.

For that reason Antonius in a rowboat visited all his ships, and exhorted his men to trust to the weight of their vessels, urging the masters that they should receive the shock of the enemy as if they were quietly at anchor, and to avoid the difficult places about the entrance of the bay.

The plan to allow the ships of Antonius to escape at first and then fall on them in the rear and in this manner capture him and Cleopatra had been opposed by Agrippa on the information that Antonius was intending to use sail. It was now hoped to thwart this stratagem, large numbers of infantry being on board waiting till Antonius and the Queen should come sailing out. Setting forth from his anchorage to the sound of the trumpet, his ships in dense array, Antonius drew up these lines a little outside the strait, but advanced no further. Commanding the right wing were Antonius and Publicola, whilst on the south shore his army remained inactive.

Octavianus was on the right wing of his own fleet, with Agrippa on the left, and it was a matter of surprise that Antonius' fleet remained where it was, doing nothing and apparently at anchor, about 1,600 yards away. Was this stalemate, then, going to last for ever? Was there going to be no battle after all? For a time Octavianus let his men rest on their oars, just waiting for what might happen; but ultimately, at a given signal, he led forward both his wings, forming his line into a crescent shape, with the hope of either surrounding Antonius' fleet or breaking up their formation.

It was now time for Antonius to do something.

Those who are familiar with this part of the coast are aware that during the summer months a breeze sets in during the forenoon from the sea, and blows till about 7 p.m.; so about midday the sea wind began to ruffle the September sea, and the soldiers of Antonius were already impatient at this delay, well confident in the height and magnitude of their ships. Then at last their Commander-in-Chief advanced. Nothing could have pleased Octavianus better, and he ordered his right wing to row backwards, so as to lure Antonius still further out. It was in this manner that amid loud exhortations and shouts of those watching from the shore the conflict at last began. There, almost reluctantly, the heavy ships of Antonius were seen to move forward to make a frontal attack with their strong bronze beaks, but it was impossible to get these craft to exert that dashing impetus essential for ramming. Well protected with large baulks of timber their hulls were, but at the expense of mobility. It was the primitive method of armouring warships, but it had meant increase of displacement, and heavier work for the oarsmen. The contest thus resolved itself into an attack by light troops against a floating fortress.

The tactics of Octavianus' swift-moving galleys were like those of an agile, rapid boxer searching out his opponent's weak places, getting in a blow, and then side-stepping in lively fashion to avoid being hit. Here and there these light galleys darted, trying to get their beaks into some part of the big vessels. If unsuccessful at first, they backed quickly out, and then either rammed again or, as a

preliminary, smashed the enemy's oars down one side. If the defence was too hot, they would concentrate on another big ship in such a manner that the assault might be unexpected. Speed, surprise, the flicking antics of the elusive trout—that was the method employed by the galleys of Octavianus. There followed immediately or simultaneously showers of spears and fiery missiles, the attackers defending themselves with light shields.

But this was no easy matter, for if the ships of Antonius were slow, they were terribly formidable. From those impressive wooden towers soldiers with long-range catapults were able to hurl ugly destruction, and the archers were very much to be feared. Therefore, it was too dangerous to dally in approach; the galleys must come dashing up, get in their work, and retire as speedily out of range. It is analogous to the modern destroyers with their pace and vulnerability attacking a battleship with torpedoes, and then scurrying off out of the way. But as the modern battleship endeavours to shell the destroyer, so did those great craft of Antonius greet the approaching galleys with dense showers of stones and arrows. Further, an attempt would be made with cast-iron grapnels, and if only these dangling entanglements could hook on the galley below, it was easy work for the men in the loftier ship to drop down death on the deck. But should the grapnel miss, the immobile vessel stood every chance of being pecked to death by the busy beaks which now surrounded her.

On the right wing, as we have already stated,

were Antonius and Publicola. Now as Agrippa on the left of Octavianus' fleet was extending his wing to surround his enemy, Publicola was compelled to advance his wing to meet Agrippa, and in this manner became separated from the centre, which now fell into confusion and became closely engaged. And thus the battle settled down to one enormous seething mass of fighting craft. On the one hand the steersmen and rowers were compelled to endure the hardship and fatigue of their office in addition to the missiles which dropped on them, but on the other there were the soldiers standing up to deal and receive slaughter. One side, graphically writes Dio, referring to the light galleys, resembled cavalry charging and retreating, while the other side was like heavy-armed troops guarding against the approach of foes.

And so amid the noise and din of men, of snapping of oars, and shattering of timber, the strife persistently went on. Woe betide any isolated galley which rammed and failed to make her retreat. Hemmed in on either side by towering hulls, she was soon disposed of. For a long time neither side seemed to be winning, and each continued to suffer losses and to win alternatively. Now all this time of indecision had to Cleopatra, as she rode at anchor in the rear of the fighting, become beyond all endurance. Would the battle never end, so that she might get away clear out of it all? Never was a woman with her horror of fighting and hatred of suspense more out of place. Never was a member of her sex less disposed to control her irritable impatient nature. 'Worn out,' as Dio says, 'woman-

like and true to her nature as an Egyptian,'* she now turned to flee, and made the signal for her own Egyptian ships to follow. We mentioned just now the breeze of this coast which blows till evening. This as far as ten miles from the shore is northerly, becoming more north-easterly further south off the Gulf of Patras. This wind was therefore fair for any vessel bound south.

Thus the amazing sight in the midst of a great battle was seen of a squadron of sixty ships hoisting their big cruising sails, avoiding engagement and speeding out to sea. All at once they came foaming along through the centre of the combatants, throwing their own comrade craft into confusion as the latter yielded a clear passage. By no manner of means had the forces of Antonius lost the day: unquestionably the result was still in the balance. And yet here was the scandalous sight of sixty units breaking away under sail! In sheer wonderment did the men of Octavianus watch them standing off down the coast towards the Peloponnesus. But presently they were to have a surprise greater still.

I suppose that of all crimes which a Commander-in-Chief is capable of committing whilst on active service and in the presence of the enemy, none could be so base as to run away and leave his ships and men to their fate. The mere mention of the idea is so revolting to our sense of right that we can scarcely conceive such a possibility. And yet that Marcus Antonius who had been with Cæsar in Gaul, who had enjoyed consular rank, had risen to

* ἀποκναισθεῖσα, ἀπό τε τοῦ γυναικείου καὶ ἀπὸ τοῦ Αἰγυπτίου (Dio's 'Roman History,' Bk. L.).

the unique distinction of triumvir, had waged wars in Europe and endured trying campaigns in Asia, had fought literally dozens of battles, now most unnecessarily and disgracefully forgot his duty as a commander and a man. Perhaps the most charitable way to look at this incident is to concede that, debauched and despondent, he had lost his nerve. At any rate, he was suddenly possessed with the idea that this squadron was fleeing, because defeat was impending. But, of course, at the back of his mind was that determination to rid himself of this fighting affair and accompany Cleopatra to Egypt, where the winter would be more pleasant.

Therefore, getting into one of those light, swift five-oared galleys, he made haste to follow in the Queen's wake. Out at sea Cleopatra recognized this craft, and made a signal, so presently Antonius came up with the Queen's ship, got aboard, but went forward and sat down in silence, with his head in his hands. Surely, in that moment this one-time great man realized the futility of his impetuous flight? But now some of the enemy's craft were coming up astern in pursuit. This inconvenience was, however, frustrated by the Egyptian ships temporarily turning round bow on to the enemy. But there was one of Octavianus' vessels which was commanded by Eurykles, and this man's father had been beheaded by Antonius, so some determination was shown. But after ramming an Egyptian ship and spinning her round with the blow, Eurykles succeeded no further and retired.

As was only to be expected, after this dramatic departure, the rest of Antonius' fleet became

dispirited and panic-stricken. Discouraged and dismayed, confused and consumed with fear, some now hoisted masts and sails, threw overboard those heavy towers and all cumbrous gear, and followed their leader's example. They could not be pursued effectively for the reason that the ships of Octavianus had come into battle without their sails. But for those vessels of Antonius which did not escape there remained a terrific battle. Set upon by the galleys, those bigger ships received vital injuries just above the waterline. Oars were crushed, rudders snapped off, and then those eager soldiers climbed on board, seized the foe, pushed them over the side or fought them in a death struggle.

As for these men whom Antonius had deserted, many of them strove fiercely in these tense combats, meeting their assailants with boathooks, cutting them down with axes, greeting them with stones and heavy missiles, driving back into the sea the climbers coming up from the galleys below. Like so many islands besieged in the sea, men were to be seen trying to get a footing whilst their opponents sought to thrust them back. The soldiers of Octavianus from their craft shot blazing missiles at their enemy, hurled blazing torches fastened to javelins, or threw pots full of charcoal and pitch. Aboard the ships of Antonius, of course, every effort was made to ward off these incendiary articles one by one; but some got past and started fires. At first, as being handiest, drinking water was used to put the fires out, and then sea-water. But the buckets were few and small, so, finally, the very corpses had to be employed.

Than that which followed it would be difficult to find a more tragic situation. For the selfsame northerly breeze which was wafting Cleopatra and Antonius into safety now fanned the flames of his deserted ships, which became masses of smoke and desperate activity. Terrible efforts were made to hew away the burning timbers and cast them either into the sea or against the enemy. Meanwhile, the crews still struggled in their grim contest, crowding to whatever part of the ship was still intact, heaving grappling irons to hook on against the nearest hostile galley, so as to leap aboard and pass the fire thereto also. Thus a terrible holocaust raged on that ruffled sea, and it was when the flames spread to the holds that most dreadful incidents happened. Men became suffocated with the acrid smoke, others were burnt alive, whilst the soldiers were roasted inside their red-hot armour, and others, again, unable to endure the heat, committed suicide by leaping into the sea.

In this manner the famous battle ended, indecisively, with heavy losses for both sides, and at sunset that ruined fleet which Antonius had once commanded came in from the sea and re-entered the bay. Octavianus had scarcely appreciated the fulness of the results—hardly realized how near to complete victory had been the course of events. What he did know was that his enemies were now bottled up inside the bay again : what he expected immediately was that they would under cover of darkness attempt to come out again and escape. Therefore Octavianus did not bring his galleys and men back to the beach that night,

but kept them at sea blockading the entrance off the straits.

Now on the following day the situation became manifest to him, and he invited both the fleet and army of Antonius to surrender, telling them that their general had fled. But the forces declined at first, and then hesitated ; for, to their great credit, they still believed that Antonius was not gone for good, still relied on his reappearing very shortly and leading them to victory. But as the days went by and men's spirits degenerated, and desertions became more numerous, everyone seemed to lose heart. The result was that the soldiers either scattered or surrendered with the fleet to Octavianus. Not by valour nor by tactics nor by strategy had this fleet been defeated, but by the folly and bad influence of a spoiled woman.

Technically the victory did not take place till September 9, the day of surrender. But actually it was September 2, the day of the battle, when Octavianus became all-powerful and his reign as Rome's first and greatest Emperor began. It is one of the surprises of history and of men's individual deeds that one small factor can change the whole of the future. Just as in the fifteenth century the herring began to spawn in the North Sea instead of the Baltic, and thus brought a yearly fortune to the Netherlands so that they were able to become a great sea-power until the Anglo-Dutch wars, so by the impatience of a brunette the great Roman Empire was to come into being, supreme on land and sea. Once again Orientalism had been denied its sway over the future of the world's development.

As for Antonius on his pathetic voyage, for three days he remained in the prow of Cleopatra's ship, a broken man, despondent, desolate. Not till the vessel arrived at Tænarus (the modern Cape Matapan at the extreme southern end of Peloponnesus) did he converse with the woman who had destroyed his career. And when some of his transports reached here, Antonius was able to learn the story of that sad battle—learnt how that after resisting gallantly for a long time, that heavy sea rising ahead of his fleet had finally compelled the burning ships to abandon the fighting about four in the afternoon. Three hundred vessels had been captured by Octavianus, and about five thousand men killed.

From Tænarus Antonius sailed to Libya, but sent Cleopatra back to Egypt. Broken-hearted, he tried to commit suicide, but was prevented and taken to Alexandria, where he found Cleopatra contemplating the scheme of hauling her ships across the Suez isthmus into the Arabian gulf, over a distance of seventy odd miles, her intention being to settle with a large force and much wealth beyond Egypt. It was a last adventure to retain her regal prosperity. But the Arabs set fire to and burnt the first ships that were drawn out; and as Antonius had sent orders from the Peloponnesus telling his army to retreat quickly through Macedonia into Asia (as had been done after Salamis), and since he was still under the false impression that this army was intact, he succeeded in dissuading the Queen from her intention. He himself now settled down in a sea-dwelling

near the Pharos, opposite Alexandria, and remained alone, disgruntled, a misanthrope, presently to learn the grievous news that his army no longer existed.

Unable to resist Cleopatra's influence for long, he presently left his sea-dwelling and joined her in her palace. But the last act in this drama was about to begin. For, after the winter, Octavianus reached Egypt, and in vain did the Queen try to cast her spell over him as she had over his one-time brother-in-law. Ready as she was to betray the man she had ruined, she was fully prepared to do anything that her feminine arts could effect if only she could preserve her liberty. Fleeing, she spread a false report of her death, and this information, coming as the climax to all his anxieties, so affected the debauched, indulged Antonius that he tried to slay himself, but was carried to Cleopatra still lingering yet about to die.

Octavianus entered Alexandria. Cleopatra, as everyone knows, committed suicide by the bite of an asp, and so the curtain descended on one of the most moving dramas in the history of the world, and one of the most tragic. Who can wonder that so often throughout the ages it has been the delight of poets and playwrights? As a study in human nature it is the logical story of a man and woman, both of great individuality and considerable cleverness, bound together by physical attraction; each of them animated by the love of luxury and unbridled ambition, and paying at the end that price which always is demanded.

But as a study in naval history the battle of

Actium, the crisis of this drama, will always be interesting, not merely for its sidelight on tactics, not merely as showing the limitations of galley warfare, but as exhibiting the enormous value of morale when two fleets come to grips and the decision hangs in the balance. The return of Antonius within that week, the sense of leadership, the personality of that experienced warrior, might and could have rallied both fleet and army. Octavianus could still have been defeated and sent back to Italy ; but the story of Rome would have become different, and this nephew of Julius Cæsar would never have become known to us as Augustus, the first Emperor of Rome—an empire bounded by the Atlantic on the west, the Euphrates on the east, the Rhine on the north, and the Sahara on the south.

For that reason the battle of Actium is entitled to be regarded as one of the most momentous events in the progress of the world.

CHAPTER III

BATTLE OF LEPANTO, A.D. 1571.

We now pass over sixteen centuries of Mediterranean history, only to find that the galley was still used in that sea as a man-of-war; and we could wish for no better instance of the seaman's conservatism. Notwithstanding that the carack and the galleon had come into employment as the ocean-going, bigger-bodied, more seaworthy type of ship, from which the three-decker and Nelsonian ships eventually were to evolve, yet the swift-darting oared ship of ancient Greece and Rome did still continue for an amazing period. And before we shall be in a position to appreciate the spirit of the battle of Lepanto it is necessary to get clearly in our minds why, at a time when comparatively big and lofty-sailing warships of three, and even four, masts, armed with broadside ordnance, were in vogue, one of the most momentous battles in the world's history should be fought out by fleets of galleys. For, recollect, this was after Columbus and other great navigators had sailed across oceans in square-rigged ships, and it was only seventeen years before the Armada was to enter the English Channel.

The answer is found partly in the fact that sixteenth-century Spain and Venice still clung affectionately to the type of craft which had been

used by their ancestors from time immemorial. For coastal work, for going in and out of straits, creeks, and bays, for negotiating narrow waters, they were in southern summer seas particularly suitable. But especially in their mobile qualities for attack did faith in them continue, even when the advent of artillery was demanding and encouraging the use of the sailing ship with its superior gun platform. But that is not all. Mediterranean seafarers almost resented the innovation of the gun; for many hundreds of years their tactics afloat had been those of grapnelling, boarding, and hand-to-hand fighting. The Spaniards, especially, found difficulty in the sixteenth century in getting away from this idea, so deeply rooted. Ramming was still believed to be an effective reply against the big-bellied, gun-armed sailing ship. In old prints of this period we find contests depicted of these light craft attacking and being attacked by the bigger craft; and in Elizabethan literature there are not lacking references to the controversy between the merits of the sailing ship and the galley as war craft.

If the sailing ship in bad weather and with her superior height could dominate the galley, the latter in light airs and a smooth sea was nimble and easily manœuvred, and could attack and retire in the most annoying manner. And yet, even in Cadiz Roads, Drake was able to report in the year preceding the Armada operations that 'there we were both oftentimes fought withal by twelve of the King's galleys, of whom we sank two, and always repulsed the rest.' And Fenner, too, sent

reassuring news to England as to the limitations of these southern craft. 'I assure your Honour there is no account to be made of his galleys. Twelve of her Majesty's ships will not make account of all his galleys in Spain, Portugal, and all his dominions within the Straits, although there are one hundred and fifty in number. If it be to their advantage in a calm, we have made such trial of their fights that we perfectly see into the depth thereof.'

But this belief in the galley as a fighting unit was not confined to the northern shores of the Mediterranean, and here we must introduce that other factor which was the whole cause of the Lepanto battle. We must cast our eyes back to the eighth century of the Christian era, by which time the advance of Moslem power in Europe had become a real and terrible thing. Spain came wholly under the dominion of the Arab; these Moslems overran Southern and Central France, and threatened to become the dominant power of Western Europe. Presently the whole of the North African coast from the Nile to the Atlantic was to be under their sway, but at length the conquest of Granada by the Spaniards, in 1492, sent the Moslems finally back across the Gibraltar Straits to Northern Africa.

What followed? Well, the Arab was a fine sailor, and a great navigator, and a desperate fighter. He left in the seaman's vocabulary such words as 'admiral,' and he had introduced the Oriental lateen rig into Mediterranean galleys. There is no question about it that these cruel, savage, brutal infidels were extremely able sailors, and they were

a dreadful menace to Christian ships. But between the Catholic countries of Southern Europe and these Moslems there was an inevitable hatred, intense and lasting. Had not the latter wrested the Holy Land from the Eastern Empire? Did not Crusaders wage war against them for that one reason? Did not the Moslems continue to harass the trading ships of Venice, Genoa, and elsewhere persistently through generations? But now, turned out of Spain, how were they to live and prosper except by employing their consummate art as corsairs, and revenging themselves on the Christians whom once they had dominated?

Exceedingly gifted intellectually, of undoubted daring and bravery, full of bitterness at having been driven from that portion of Southern Spain where they had dwelt for seven centuries, they became the very scourges of the Mediterranean, a perpetual menace to ships and coastal towns and peoples. The very mention of their names, the very sound of Algiers and Tunis, was to strike terror in the hearts of women, children, and courageous men: the mere thought of these Moslems was to conjure up the terrifying picture of tortures and massacres, shameful slavery, and an existence worse than death itself. Avaricious, heartless, bloodthirsty, fanatical, they stopped at nothing, neither expecting mercy nor extending it. Now it was obvious that this sort of thing could not be tolerated by the Christian nations, and thus we find a series of expeditions against these corsairs, but with only varying successes. It is interesting to note that matters came to such a crisis in 1538 that a battle was

fought off Prevesa—that is to say Actium, where Octavianus and Antonius had operated over fifteen centuries before. But in this case the Moslem fleet defeated the allied Christian fleet of Spaniards, Venetians, and Papal craft, and thus that old enemy was still able to continue his work of ravaging coasts and destroying shipping. Concerted action was essential, but it must be inspired by perfect agreement, and so we come to the year 1570, and at this time Philip II (who had married Mary Tudor of England) was King of Spain, Pius V was Pope, and Selim II, a famous drunkard, was Sultan of Turkey.

It was towards the end of that year that deputies from Spain, from Rome, and Venice met with a view to co-operating against the Moor of Tunis, Tripoli, Algiers, and against the Turks. Something had to be done and it must be done efficiently. It was therefore agreed that 200 galleys, 100 transports, 50,000 infantry, and 4,500 horses, plus artillery, should be collected. This treaty was to be perpetual, yet actually it existed less than two years, though long enough to accomplish the desired result. Ratified on May 24, 1571, we have here a sixteenth-century League of Nations formed for the good of the world under the title of the Holy League. Holy it was, for it was the binding together of the great Mediterranean Christian powers against the infidel terror.

There comes now on to the scene Don John of Austria, a man of only twenty-five years, who was to go down through history as admiral of one of the greatest battles in Christendom. Like other

famous Commanders-in-Chief up to the late seventeenth century, he was a leader first and a seaman second. To him fighting on land was little dissimilar to fighting on sea. The natural son of that famous Charles V, he passed as the son of a Spanish nobleman, and had been appointed by Philip II as commander of the latter's forces. There can be no doubt from the evidence we possess that Don John was one of those men to whom the power of leadership and organization on a big scale came naturally. The occasion was a great one, the results were of tremendous importance, but his was the personality which was equal to the immense responsibility.

Now this triple alliance, this Holy League of Nations, determined on wiping out that long-standing Moslem menace, naturally caused a great sensation throughout Christendom. It was a big idea to be carried out in a big way, backed by every influence, political and Catholic, with unlimited funds and the fullest resources as to ships and men. It possessed the united international approval in Southern Europe, for it was to wipe out an old and common enemy. Enthusiasm was intense, everyone looked forward anxiously to the result. Thus, as always happens in any campaign, where it is inspired by a great national cause, there was from the first a mighty impulse sustaining the morale of the men and inspiring them to win or die. It was the spirit of Salamis, but on a higher plane.

Conversely the Sultan was fired by the news of the League's determination, and from his vast imperial resources and fellow Moslems in the

Mediterranean he was able to collect a huge fleet, experienced, powerful, and resolved to fight till the end. Furthermore it was to be commanded by the Sultan's brother-in-law, Pasha Piali, a man as intrepid as Don John of Austria, and as determined to win victory.

This was the age when men were not ashamed of religion or to fight for it. This was the time when chivalry was an inspiration and military glory was at its grandest. Here was going to be such an occasion as to combine all that was noble in a man together with a chance for high adventure, and it enflamed the minds of old and young. It was to be like some new crusade, and in Don John they believed they had a leader who expressed the very height of this chivalrous adventurous spirit. Gentlemen of birth and position and intellect, such as Cervantes, whom we think of as the author of 'Don Quixote,' in his twenty-fifth year served in this undertaking as a private soldier aboard the galley *Marquesa*, receiving a wound in his left hand, which maimed him for life.

It was in the spring of 1571 that the Turkish fleet came out of the Dardanelles and sailed to Crete. At Candia the concentration was made with the Algerine force, and then they all sailed up the Adriatic, and spread consternation. Venetian territory was laid waste, and the Algerine squadron operated off Venice itself. But in the meantime the Venetians were hastening the completion of their galleys, and before midsummer they had come down the Adriatic to Messina, where the great concentration of the Christian craft was to take place.

The Venetian admiral was that grey-haired veteran, Sebastian Veniero.

In Spain, where the art of shipbuilding had long since reached a high state of excellence in the building of round ships and long ships, the activity was enormous. Ninety royal galleys and over seventy other ships were being constructed at the various ports, and in the first week of June Don John left Madrid for Barcelona and set forth with thirty of the galleys, reaching Genoa before the end of that month. From here he proceeded to Naples, where in August he found riding at anchor the fleet under the Marquis of Santa Cruz ready for sea. It was here that he received the consecrated Papal banner, and after a stay of ten days he left for Messina, where the combined squadrons saluted him as their Commander-in-Chief. Since the days of Imperial Rome there had never been such a collection of warships, nor had there been a sight at sea so imposing since the Christian era had begun. Every day came additional units of galleys and brigantines. The brigantine, of course, was not the least bit like that coasting type with which we in Northern Europe to-day are familiar. She was essentially of the galley class, but was a small craft, rowed by its own fighting crew and without slaves.

In the spacious harbour of Messina resplendent in the August sunshine were over three hundred galleys, brigantines, and smaller craft, the former richly carved and exquisitely gilded, with many coloured streamers and flags from masthead, ensign staff, and peak. Don John's flagship was that

fine royal galley the *Real*, its stern ornate with historical emblems, its interior aft fitted with the greatest possible luxury of the time. Strong and fast, most carefully built at Barcelona, the *Real* was the finest galley that had ever been constructed. Of these three hundred two-thirds consisted of royal galleys, enormous heavy vessels, carrying forty pieces of artillery. The remaining hundred consisted of lighter and faster 'frigate' galleys and smaller craft. The personnel consisted of about 80,000 men, and here they were keen to go forth. If the reader requires details he may care to know that the Spanish contingent consisted of 90 royal galleys, 24 nefs, and 50 frigates and brigantines. The Papal craft consisted of 12 galleys and 6 frigates. Venice had neither equipped nor manned her contribution efficiently, but she sent 106 galleys, 6 great galleasses, 2 nefs, and 20 frigates. Grand total, 316. It should be mentioned that the nefs were not fighting vessels, but evidently transports, and if we subtract these we get a powerful battle fleet. These transports, in the subsequent approach to the battle area, got delayed, and never saw the encounter; for, being heavy and slow, they could not keep up with the battle fleet, and here (as in the approach towards Salamis) we see the danger and nuisance which such craft always are if tied to the fighting section of an expedition. Commander de Romegas, who was actually present at the engagement, says that the total of the Christian fleet was 271; but this is near enough, and confirms the assumption as to the duties of the nefs, which were ships rather than rowed galleys.

It was on September 16 that the whole fleet of 316 units put to sea, and coasted up the Italian shore towards the Otranto Straits, with a small scouting squadron ahead doing the work of light cruisers; but head winds and seas now greatly hindered the battle fleet, and much more seriously delayed the transports. The reason is clear enough, and showed the defects of the sixteenth-century craft. For consider what they were. In the case of these sixteenth-century galleys sail was used to a larger extent than in the galleys of ancient Greece and Rome, which were square-rigged. We now have a two-masted vessel, wherein the foremast was stepped right in the very eyes of the ship, and the mainmast forward of amidships, thus giving a clear space for about two-thirds of the vessel towards the stern. On each of these masts was one fore-and-aft lateen sail, with no boom, but an enormously long, curving yard. The mainyard, which was the longer of the two, extended almost to the end of the beak or ram, curving up into the air, and ended high above the poop. Normally, given a fair slant, these sails were used when making a passage approaching the scene of battle; but before going into action the masts were left standing, and the sails could be stowed along the yard. The tack of the foresail led down to the beak, but the tack of the mainsail came inboard at the head, just forward of the foremast. Double sheets with pendants led down inboard to port and starboard from both sails. In the case of the biggest of these galley species there were even three of these masts and lateens.

But if these galleys were fast with a fair wind, they

could stow sail and row if the breeze came ahead. As we know from contemporary prints, it was not exceptional to find twenty-seven oars a side with six men to each oar. This makes a crew of 324 oarsmen, but, in addition, there were the soldiers placed forward on the foredeck, where also were the cannon, with grapnels stowed by them to port and starboard. Low-lying, light draught these vessels were, with a long snout-like ram, suggestive of some bird. Down the centre of the galley ran the 'corsia' or gangway, along which two men with poles or whips strode ready to beat the rowers to the utmost exertion. These galleys were about 169 feet long from beak to stern, and their extreme beam was about 20 feet. At the stern was the moderately raised poop, with a light timber framework, which could be covered over (as in the caracks) to form additional protection from sun and weather. Below this there was a cabin.

Now in bad weather, butting into a head sea, these low-lying galleys received some protection from the short foredeck, but they must have been wet for all that. As for the unfortunate rowers, their existence during such spells of hard work must have been muscle-breaking and heartrending, and only men of the soundest constitution could possibly endure it. Therefore, as we consider Don John's fleet coming up the Calabrian coast, we can readily understand why that head wind was to cause delay. It was ten days before the fleet reached Corfu, but the light cruisers had returned with the information that the Turks were in the Adriatic ravaging Venetian territory again.

Fortunately, we know from a contemporary Bishop of Mondonedo, who had been to sea with Don John's father, Charles V, a few years previously, just what life in a galley was like, even from the view-point of so distinguished a guest. 'The passenger in a galley,' says the Bishop, 'must be humble . . . for in going on board he sacrifices his liberty . . . you find neither a bench to lie on, window to look out from, table to eat on, nor seat to sit on.' But by special grace you are sometimes allowed to take a little repose on the 'corsia' among the crossbowmen. You eat on the deck as the sailors do, 'or on your knees like women. Be careful not to throw water on the deck of the poop; still more not to spit there, for fear of being rudely called to account by the captain and fined. Sailors spit in our churches, but redden with anger when we do as much in their ships. When going to sleep,' asserts his lordship, 'you do not remove shoes or socks or coat, passengers and sailors lying down pêle-mêle. On board galleys vermin is in common: lice, fleas, bugs jump from one to the next. Privacy was impossible, clear drinking water was unobtainable; for bread you had hard black biscuit, full of worms, covered with cobwebs, and already gnawed by rats. The meat was badly cooked, and as hard to digest as a stone.'

At sea when a gale came on all lights were put out in the galley, passengers sent below so as to leave the decks clear for the sailors. 'The cries of the sailors, the noise of rapid steps overhead, the tumult accompanying work on deck, will cause you more fear than the combing seas.' 'Every time the

wind changes, when it passes from one side to the other, the lateen-yards are lowered each time to be rehoisted.' And then the Bishop describes the feeling of seasickness.

From a Venetian officer of the middle of that century we have just the information we require concerning the crews. 'Galleys manned by condemned men surpass those rowed by freemen,' says this Cristofolo da Canale, 'but magistrates should send only healthy men to the galleys.' The reason given is that the former are always at hand, but the latter cannot be denied shore leave. The condemned men were compelled to sit chained to their thwarts, but not unnaturally volunteer oarsmen were few, and these needed bounties and increased pay to tempt them. The convict oarsmen were slaves not merely to the ship but to their oars, like a dog tied to his kennel.

The only food he was supposed to need was wine, water and vermicelli kept under his thwart. Venetian galleys had the reputation in the mid-sixteenth century of being the best in the world under oars but not under sail, their freeboard being insufficient, and they were loaded too heavily. On a wind, when the men were not rowing, those heavy long yards caused the galley to bury her rail, so that the unfortunate oarsmen on the lee side were being washed down all the time by the sea. And when the galley was not under sail, but the rowers were pulling against a sea, she shipped enough water to cover the men's feet. This water, of course, charged about, detracted from her speed and endangered such shallow craft. Thus the

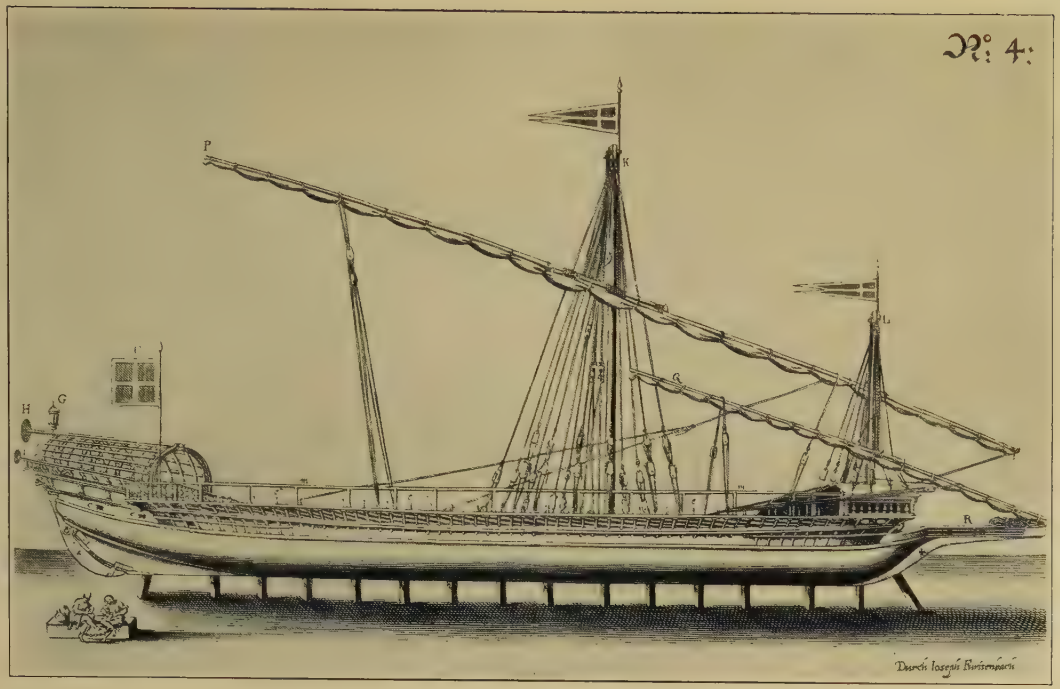
oarsmen were really best off when they were rowing against a light head wind or in a flat calm. The tendency of those heavy yards—'antennæ' was the word still used—was to make a galley roll considerably. Twenty inches of freeboard in these craft when on an even keel was not exceptional, and thus we see what unpleasant creatures these Venetian galleys were for everyone on board, except in sheltered waters and fine weather. The Turkish galleys carried their deck half a foot higher, their sails were half the weight of the Venetian, they used a very light cotton instead of hemp, and, therefore, they were able to beat any Venetian galley when it came to using the wind.

In the battle which we are about to witness we see the galley at the crest of her development, for she was about to descend in popularity in favour of the big sail-driven ship. It is curious, however, to observe how in the Lepanto craft the old and the new, the classical and the modern, meet and mingle. Thus, on the one hand, we have the reliance on such antiquities as oars, beaks, and ramming, grapnels, archers, and soldiers for hand-to-hand fighting just as at Salamis and Actium. But, on the other, we have the use of gunpowder, of cannon. It was obvious that when once the value of ordnance and increased range were recognized, the age of the galley was already passing. Thus the battle of Lepanto, if for no other reason, is the transition stage where the warship and naval tactics begin to be separated from the old régime. As already mentioned, these guns (except in those great galleasses which carried forty) were mounted

forward, and thus could fire only straight ahead. Thus, too, the tactics were limited to those of the ancients. But the Venetians made the mistake of putting too many guns in their galleys, and so, as Canale says, 'With the wind astern the vessels plunge as though they would go to the bottom . . . and the masts are too far forward and too high.'

With this information, with these mental pictures before us, we are now in a position to understand the coming engagement; for without a knowledge of the conditions on board the ships, without an appreciation of their limitations, it is only natural that we should find even experienced modern seamen complaining that they can make nothing of these 'old-fashioned' battles. History is now more closely studied by naval officers on both sides of the Atlantic, but it is only a few years ago that admirals of an earlier school derided such studies as waste of time. If we can enter into the problems that confronted the admirals at Actium, Salamis, Lepanto, where the type of warship restricted the methods of fighting, surely we can deduce valuable lessons and treasure up principles, quite apart from any consideration of strategic or human interest?

Don John, with his two hundred and seventy-one ships, reached Corfu on September 26, and learned the valuable piece of intelligence that the Ottoman fleet had been seen standing into the Gulf of Lepanto. He summoned a council of his captains and decided to give the Ottomans battle. It is thus that history repeats itself, and we get another instance in Greek waters where the use of local



MEDITERRANEAN GALLEY

Showing masts, yards and beak, with standard in place.

To face p. 90

geography is employed for a warlike purpose. After reviewing and drilling his fleet, and without waiting for those tiresome transports not yet arrived, we see him advancing down the Ionian Sea, on October 3, then past the entrance to that gulf off which the battle of Actium had been fought. And then an autumn fog enveloped his fleet, but reaching the east side of the island of Cephalonia he remained here a couple of days owing to head winds. But on October 7, two hours before dawn, at that time when human nature is at its lowest and courage is not at its highest, with the weather not settled, but the wind falling lighter, the fleet put to sea.

In the darkness we can, then, imagine this great Armada groping its eastward way across the twenty miles of open sea. As this was accomplished by sunrise, the speed must have been about 10 knots. Now it is a good rough working rule that the square root of a sailing vessel's length on the waterline gives you some idea of her speed. (This is not a scientific formula, but merely a general guide under average conditions, and many of us find it works out in practice at sea.) Therefore, taking one thing with another, and omitting the overhangs of these galleys, a speed of 10 knots to the entrance of the Lepanto Bay, south of the ancient Acarnanian shore, under oars, was reasonable for these craft in a hurry to get the open passage effected during the dark hours. Here was the gulf's mouth narrowing, after another twenty miles, to about five miles in width, where the Ætolian shore on the north and the Achaian coast on the south bend towards each other. And the details of the battle agree with this. Some writers

have stated that this battle was fought in the same waters as the battle of Actium, but this is wrong by about fifty miles.

Looking up the gulf, before long the rising sun revealed to Don John's flagship the enemy fleet, which, according to that de Romegas who was present, consisted of 333 craft, 230 being galleys, and the rest being either those heavier galleasses or smaller craft. The Ottoman fleet therefore had a numerical superior fighting strength. It was a dramatic moment that at last the followers of the Cross were to meet those of the Crescent in a battle that had been so carefully planned and was to mean so much. Everything on the side of the Allies had been prepared on a religious basis by prayer and fasting; each man had been to confession and received the Holy Sacrament. And now, during this final approach, by orders of the Commander-in-Chief, crews and officers knelt down on deck in supplication for victory. 'There is no paradise for poltroons,' they were told.

And then with dramatic gesture that standard of the League which had been solemnly blessed whilst at Naples was unfurled aboard Don John's flagship *Real.* The custom was for the standard to be not right aft, but immediately forward of the poop. I have before me a copy of this standard, and a thing of great beauty it is. In shape it differs from the usual square standards of old prints and modern usage, for the side remote from the staff is a little narrower and rounded at the end. The square portion near the staff contains the crucifixion in the centre with coats-of-arms below. As a work of

art this standard was most beautiful and in keeping with the historic event. It was a reminder to everyone that this combat was a religious occasion. 'You have come to fight the battle of the Cross,' Don John had told them.

Written instructions had long since been issued to each galley captain as to how the battle-line was to be formed, so now this was carried out according to plan, and the senior officers repaired aboard the flagship for Don John's final orders. In order to visualize this Allied fleet we must think of them advancing in line-abreast covering a space of over three miles. Line-abreast was, of course, the custom, because (with the few exceptions of those bigger craft which mounted forty guns) the guns could be fired only bow on against the enemy. This line-abreast was in three columns. In the centre was Don John with sixty-three galleys; the right wing was commanded by the Genoese Admiral John Andrea Doria with sixty-four galleys, the left wing being under that Venetian Barberigo. In addition, the Commander-in-Chief had thirty-five galleys under the Marquis of Santa Cruz, which were in reserve ready to operate as opportunity might demand. On one side of Don John was Mark Anthony Colonna, and on the other was the experienced veteran Veniero. Immediately in the rear of these front-line ships were small columns, bringing the grand total up to two hundred and seventy-one. The smallest craft took but little part; it was a day for the battle fleet which could fight with the utmost attack. So with the enemy, the smaller vessels hardly came into action.

With his pennon flying at the mizzen peak over the delicately chiselled *Real* and the standard of the Holy League fluttering at the poop, the flagship led the fleet on. At first the sun was of course in the eyes of the Christians and to the advantage of the enemy, but as the day wore on it naturally shone in the eyes of the Moslems. It is to be noted also that the wind, which since leaving Cephalonia had been easterly, now went round to the west after a period of flat calm. Thus the approach became easier for Don John's fleet and harder for the enemy.

As the latter revealed themselves, their strength was greater than Don John had expected to find. The Ottoman formation was also line-abreast, or more strictly crescent-shaped, and by reason of their numbers extended over a space wider than the Allied line. The width of the gulf between the Ætolian and Achaian shores at the narrowest is about five miles, and the sight of 600 craft about to begin battle between those headlands was enough to thrill the least emotional spectator. In the centre of that Ottoman line was the Commander-in-Chief, Ali Pasha; the right was under Mahomet Sirocco, Viceroy of Egypt; the left was under Uluch Ali, Dey of Algiers, and a renowned corsair. The Commander-in-Chief's galley was a large and splendid vessel, with a deck of black walnut, externally carved and gilt, internally sculptured, and rich with luxurious hangings, whose silk and gold were excelled by few palaces. With hundreds of pennons flying above these craft, with scimitars flashing in the sunlight, and jewelled turbans, this magnificent

infidel display, majestic and powerful, well trained by innumerable raids and sea-fights, swept towards those ships whose men had been toiling since four that morning.

Prescott, in his invaluable history of the reign of Philip II, has given us reliable information, for his researches among authentic contemporary material in the archives of Spain, Vienna, Venice, and elsewhere have laid us under a great debt by his patience and thoroughness. From him we know what the Christian tactics at this battle of Lepanto were to be. In that three-mile line each galley was to occupy as much space as necessary for manœuvre, yet not to leave space enough between ship and ship, column and column, for the enemy to break through. When once engaged, the procedure was not to use the ships in columns or squadrons, but individually, each galley captain singling out his adversary, closing with him at once, and then quickly boarding him. Professionally, therefore, the Spanish tactical idea of Don John was extremely elementary, and showed a lack of appreciating the value to be got out of ships used as squadrons; but we must remember that the Spaniards clung tenaciously to this idea for years after the Lepanto battle.

One good thing, however, was to come out of this engagement, and that was to show the absolute uselessness of the beak rams, for Prescott says very distinctly that 'the beaks of the galleys were pronounced to be a hindrance rather than a help in action,' and one can quite readily understand how those long, snipe-like beaks were a positive weak-

ness. 'They were rarely strong enough,' he affirms, 'to resist a shock from an antagonist, and they much interfered with the working and firing of the guns. Don John had the beak of his vessel cut away. The example was followed throughout the fleet, and, as it is said, with eminently good effect. It may seem strange that this discovery should have been reserved for the crisis of a battle.'

As the Allied line approached nearer and nearer, the wings in both fleets were somewhat separated from their respective centres; but the left wing of the Allies was not yet wholly visible, being partially hid behind the projecting Ætolian shore, for Barberigo was doing his best to get all the flank protection he could by keeping as close to the land as he dared go. In advance of Don John with his galleys were six great galleasses; and if we desire a picture of Veniero's ship we shall see it in the tapestry depicting that battle in the Ducal Palace, Venice. This design by Andrea Vincento has been reproduced in Zanetto's 'Palazzo Ducale,' and this bearded warrior is to be seen standing by his standard at the poop, where a gun is being fired over the port-quarter. Another reproduction is to be found in Professor Condeminas' recent 'La Marina Espanola.'

The first gun was fired by Ali Pasha, doubtless to try the range, and answered by Don John. Each fired again, and now a deep noontide silence fell over all those ships—a silence of suspense as if every heart was waiting for the dread event to follow. Nor had they long to wait, for, with the clear Greek air rent by the fierce cries of the Turks, the

foremost Ottoman ships as soon as they were within range opened fire, to be followed by the other units of that side. Well can we imagine the feelings of their rowers pulling and toiling against the head wind into the fray; for nearly all the Ottoman oarsmen were Christian slaves who had been captured in such affairs as raids and piracies. Condemned for years to such task-masters, it was galling to be advancing against their own people. They could hear the trumpet aboard Don John's *Real* summoning the fleet to action, and then all the Christian guns that could bear thundered across the water against the infidel ships.

Don John's great galleasses with their heavy armament were ordered to be towed half a mile ahead of his fleet to intercept the Ottomans, and did so much execution that the enemy had to open out his advancing galley line and pass on either side so as to avoid the fire, without engaging. This much having been accomplished, the galleasses took no further part in the fight. We must look now at the Turkish right wing which was hugging the coast opposed to Barberigo's squadron. In those days there was no such thing as an accurate chart of these waters, and Barberigo, whilst anxious to get near the shore, did not possess the local knowledge which Sirocco owned. Therefore the Christian left wing had left a certain space between the north end of their line and the shore. Quickly appreciating this, Sirocco spurred on his galleys at immense speed, got his squadron in between the shore and the landmost Christian ship, and thus made a flank attack. The result of this tactical

cleverness was that eight Christian galleys were sunk, others captured, and Barberigo received an arrow in his eye, mortally wounding him.

But valorously the Venetian galleys contended, even though their line was turned. So splendidly did they rally that at last they beat off their enemies, and sword in hand boarded and captured ship after ship; in certain cases the Christian galley slaves broke their fetters and joined in the fray against their late Ottoman masters. At last the galley of Mahomet Sirocco himself was sunk and he was slain. From that point his men lost heart and fled before the Venetian fighters, and either escaped by running their ships ashore on the adjacent beach or perished in death. Happily Barberigo was not to die until such encouraging news reached him.

So much, then, for the Allied left wing. On the right, it will be recollected, was John Andrea Doria. His opponent Uluch Ali here attempted the same tactics as Sirocco had succeeded in, but Doria was too smart for him, and by extending the line far away to the right prevented Uluch Ali's effort from succeeding. Here followed quite an interesting situation; for, in so extending, Doria's squadron was drawn away from Don John's centre, which was left exposed. Uluch Ali spotted this and came charging down, detached certain of the Christian galleys, sinking some and capturing one. A very pretty battle of wits was therefore waged. Uluch Ali would have effected even more damage still, but now came along that reserve force which had been waiting for just such an occasion. Don John's flagship was being assailed

by several Turkish galleys, but now with the arrival of the Christian reserve force these infidel craft found themselves between two fires. The result was that Uluch Ali had to flee and cut adrift the prize he was towing astern.

But what had been happening at the centre this while? Don John and Ali Pasha, like too well-matched doughty champions, were anxious to get at each other. Aboard the one was this standard of the Holy League; from the other flew the great Ottoman banner, ancient and regarded as sacred, covered with gold letters from the Koran. There is something very noble and grand in this display, even if it is lacking in scientific value. These two rival galleys, so picturesque, so perfectly constructed, so well commanded, shot ahead from their respective lines, as the oarsmen rowed with all the physical power they could call forth. They closed with a terrific impact, so that the much bigger and loftier infidel flagship was hurled upon the *Real* till the former's prow reached the fourth rowing bench of the Spaniard. But soon they separated and then the deadly combat set in.

Aboard the *Real* were three hundred Spanish arquebusiers with their portable guns on forked rests. Ali Pasha had a like number of Turkish infantry and two hundred archers. With arrows and musketry and a terrible din of cannon the *Real* was attacked, but the Ottoman gunnery was not good and was aimed too high over the Christians' heads. The Moslem ships' sides, moreover, were not protected, but the *Real's* were. Thus at quite short range the latter's ordnance discharged destruc-

tion on to the enemy's decks, and every time there fell a heap of Turkish soldiers dead, only to be replaced immediately by the living. In this hot centre of the battle near the two flagships gathered Don John's loyal comrades Colonna and Veniero (76 years of age), while Ali Pasha was similarly supported by his valiants. In the picture by Andrea Vincento we are shown Veniero's vessel ramming the Ottoman flagship, smashing the latter's oars on the starboard side, while the Christian crew, armoured and helmeted, rush on with their boarding, firing muskets as they go. To the starboard of Veniero's ship is seen the *Real* with Don John and the Holy League's standard. The lateen-yards, half-lowered, with sails stowed along them, fighting tops, and many other interesting details are clearly shown, including the high bulwarks for protecting the rowers, whose oars come out through circular ports below.

Over that gulf floated the smoke of cannon and the roar of battle, while a series of separate petty engagements were being fought out in accordance with the old-time fashion, galleys grapnelling each other and men striving hand to hand. To such an extent was fighting more necessary now than manœuvring, that Don John had the convict oarsmen unchained and they became active contestants. Fiercely waged this pêle-mêle onslaught till the decks of both sides were piled with dead—in some cases there was not a live person left on board—and the galley's hulls were stained crimson with blood.

It was on the third attempt that the Spaniards in assaulting Ali Pasha's flagship were to have

BATTLE OF LEPANTO

To face p. 100

success. For Ali was knocked down by a musket ball, though not killed. Soon the Turks in this vessel were overcome, and one of Don John's unchained armed oarsmen saw the opportunity of a lifetime, a chance that to a convict was heaven-sent. Brandishing his sword, he refused to be tempted by Ali Pasha below to the ship's treasure, but cut off the Ottoman's head and brought it proudly to the feet of Don John. The latter, however, was horrified at the dutiful convict's deed and ordered the head to be thrown over the side.

But Ali Pasha's death and the capture of his galley formed the turning-point in this bloody battle; for down came the banner of the Crescent, and up was hoisted that of the Cross. It was the signal to the rest of the fleet that victory had come at last, and the wild shouts which greeted this announcement in nowise assisted the enemy's decreasing confidence; thus, within four hours of the commencement, Lepanto was won, for the centre, like the two wings, had collapsed. Those Ottoman ships which were not boarded or sunk now surrendered, with the exception of some who escaped. On the death of Ali Pasha, Uluch signalled for the surviving vessels to retreat. Setting as much of his lateen-sails as remained, and using his oars too, he made off to the north in the direction of Santa Maura. Doria went in pursuit, but could not get up with him, for his rowers had been crippled by the wounds and hardship of the fight and could not get the required pace for the chase. However, some of Uluch's galleys managed to get ashore on a headland and pile up. Forty others

stood out to sea and got right away out of sight, and thus the great longed-for victory had come to Christendom.

It is a matter for criticism that this success was not followed up, for Don John's fleet was between what remained of Uluch Ali's vessels and his base at Constantinople. There seems to have been no pursuit during the ensuing night hours. What followed was that, in consequence of the rising wind and sea, Don John took his fleet and his prizes into Petala, and before reaching there a gale of wind set in. Some thirty Ottoman galleys which got ashore were captured. One hundred and thirty enemy galleys were taken altogether, all the rest of them being burnt or sunk or broken on the rocks, so that only about fifty got away. Uluch Ali was unfortunately one of these renegade Christians become Moslem corsair, but there were plenty of them in the sixteenth century—men whose lust for wealth and adventure was insatiable.

The losses at this battle were stupendous, and have been variously estimated. Jurien de la Gravière gives those of the Christians as fifteen thousand, and of the Moslems as fifty thousand, but twelve thousand Christian slaves were released from the chain. It is true that the Moslem corsairs continued to harass the peaceful freight ships for many generations to come: nor, to-day, is a sailing vessel becalmed off the Moorish coast safe. But Lepanto is in every sense of the word a decisive battle, and for the third and last time it determined the fate of the world's future by settling that old struggle between East and West. As for Don John

of Austria his fame became immortal, but it remained for Pius V on receiving news of the great victory to quote in an altogether new sense those words which he was accustomed at the altar to say daily: *Fuit homo missus a Deo, cui nomen erat Joannes.*

PART II

THE SAILING-SHIP PERIOD

CHAPTER IV

THE ARMADA OPERATIONS, 1588.

The coming of the Armada into the English Channel and the intention to invade were the culmination of a long series of incidents rather than a separate effort. In other volumes I have shown how Spanish ships and seamanship and navigation had progressed, thanks largely to that far-sighted Prince Henry the Navigator in the earlier part of the fifteenth century. With brief intervals he had gone on with his great work at Sagres from the year 1415 to 1460, and largely to his influence can we trace the subsequent finding of the New World by Columbus, Da Gama's finding a sea-way to India, and Magellan finding a way round the world. After such essential discoveries the certainty of Spanish colonial expansion, the encouragement to shipbuilders, and the study of navigation were bound to follow. The great fact that the ocean was the sure route to wealth and power was demonstrated and proved.

Now, it is a human characteristic that success and material prosperity will in the average human being excite a spirit of jealousy. The character of a crowd, and in particular that of a nation or tribe, represents human nature in the aggregate. Thus, the secrets of the Orient's wealth having been discovered, and the immense possibilities of the trans-

Atlantic continent having persistently manifested themselves in those Spanish treasure-ships on the seas, it was obvious enough that the Englishmen would resent all this good fortune being in foreign hands. England was poor, trade was bad and limited, new markets were required, and it was recognized that the only improvement could come by way of the sea. Thus at a time, be it remembered, when English sailorhood was numerically small, consisting chiefly of men who went fishing, or coasting, or across the North Sea, or down the Bay of Biscay, there was a real need for some wider scheme to encourage and educate.

Henry VIII realized this when he founded seamen's guilds at Deptford-on-Thames, Kingston-on-Hull, and Newcastle-on-Tyne; and Edward VI carried on the idea in appointing Sebastian Cabot as Grand Pilot of England. Thus there was the need for encouragement to use the sea, and there was this international jealousy as an impetus. There was also that characteristic English attitude of suspicion towards foreigners, which is seen clearly in the literature of the time; and, finally, in this sixteenth century there was the religious difficulty. Now, if there are three factors for causing international trouble you will always find them under these three heads—jealousy over material prosperity, religious disagreement, and insult to tribal patriotism. But, collectively, they are the sure and certain forerunners of hostilities.

Thus the Armada fighting was the culmination of notable incidents spread over a period of years. It was a war that everybody saw coming inevitably;

it was essential in order that peace might follow. Captain John Hawkyns, writing to Walsyngham in February of the year preceding Armada, put the matter quite plainly and sincerely: 'I do see we are desirous to have peace, as it becometh good Christians, which is best for all men; and I wish it might anyway be brought to that pass; but in my poor judgment the right way is not taken. If we stand at this point in a mammering and at a stay we consume, and our Commonwealth doth utterly decay. I shall not need to speak of our estate, for that your Honour knoweth it far better than I do: neither need I to rehearse how dead and uncertain our traffics be; most men in poverty and discontented, and especially the poorer sort; our navigation not set on work; but the French and Scots eat us up, and grow in wealth and freights. . . . We have to choose either a dishonourable and uncertain peace, or to put on virtuous and valiant minds, to make a way through with such a settled war as may bring forth and command a quiet peace.'

There is no need to enunciate all those preliminaries which at sea expressed so definitely the animosity between the two nations. But already in 1583 Philip of Spain had been urged by his admiral, the Marquis of Santa Cruz, to attempt a conquest of England. This was the officer whom we have seen fighting at the battle of Lepanto. The suggestion was pressed forward again in 1586 in consequence of the behaviour of Elizabethan seamen in the West Indies and elsewhere. Santa Cruz died in February, 1588, but the proposition

had remained very much alive, so that a great Spanish fleet was at last being completed for the intended service. 'There hath happened between the Spaniards, Portingals, and ourselves,' wrote Drake to Walsyngham in May, 1587, 'divers combats, in which it hath pleased God that we have taken forts, ships, barks, carvels, and divers other vessels more than a hundred, most laden, some with oars for galleys, planks and timber for ships and pinnaces, hoops and pipe-staves for casks, with many other provisions for this great army.' For in 1587 Drake had succeeded in destroying the Spanish shipping in Cadiz, and 'singed the King of Spain's beard,' and, furthermore, he had upset entirely the Spanish plans of invading England, for at least a year. Incidentally, his ocean-going ships had positively proved their superiority over the galley type, such as was used at Lepanto, and to which the Spaniards were still disposed as a war vessel. 'We were both oftentimes fought withal by twelve of the King's galleys,' he writes, 'of whom we sank two, and always repulsed the rest.' There were 150 of these oared craft, but Fenner also reports that 'if it be to their advantage in a calm, we have made such trial of their fights that we perfectly see into the depth thereof.'

Thus the period which ended with Lepanto marks the dividing line between the galley and the sailing-ship type of man-of-war. In the former guns were mounted at the bows; in the latter ordnance was in greater number, the great value of broadside fire shows itself, and this, during the seventeenth century, entirely revolutionized naval

SIR FRANCIS DRAKE

(From a contemporary print.)

To face p. 110

tactics ; the line-ahead fighting became necessary in order that the greatest number of guns might concentrate on the enemy. Everything now must be done to make the ship a perfect platform for the cannon, and the bigger the ship, the more steady the platform. Such an English ship as the *Triumph*, of 1,100 tons, for instance, carried a battery of thirty-nine, varying from what may be conveniently reckoned 30-pounders down to 6-pounders.

This does not mean that the Spanish fleet did not contain big ships well armed ; on the contrary, their most heavily armed was the *San Lorenzo*, with a battery of thirty-four guns, ranging from 42-pounders to 6-pounders, and there were others of twenty-one and less number of guns. But the old idea of the galley being such a terror in battle was now proved by Drake's Cadiz expedition to be false ; the future of naval warfare must be based on that bigger-bodied, more cumbrous ship, which could go anywhere, and fight in all weathers. Independent of the shore, with far more powerful armament, it needed only an improvement in the guns' range to make boarding tactics as obsolete as the spears of Salamis. It is true that the Spaniards still looked upon a sea-fight to be decided by boarding, and for this reason they carried more soldiers than were in the English ships. The latter had, however, a superiority in armament. We can see that the Spaniards had time to profit by the Cadiz disaster, for when in the following year the Armada set out there were in it only four galleys, and not one of these ever reached the English Channel.

'Now are we come,' wrote William Camden, the

Elizabethan historian, 'to the yeare of Christ one thousand five hundred eighty and eight, which an Astronomer of Konigsberg about an hundred yeeres before foretold would be an admirable yeere. . . . The rumours of warres which before were but slight began now to increase every day more and more: and now not by uncertaine fame, but by lowd and joynt voyce of all men it was noysed abroad that a most invincible Armada was rigged and prepared in Spaine against England, and that the famousest Captaines and expertest leaders and old souldiers were sent for out of Italy, Sicily, yea and out of America into Spaine.'

For during the winter and spring the Spaniards resumed the preparations which Drake's Cadiz expedition had halted. In England this was well known from merchants travelling abroad, from seamen in trading ships, and from spies: but not even Howard knew when his enemies would arrive, and, indeed, he was expecting them by the middle of May. It is to be noted that Spain had galley establishments at Barcelona and Seville, but no naval dockyards. The whole Armada of 130 sail included only 25 vessels belonging to the Spanish Crown, but they were able to commandeer their merchantmen. It included Spanish, Portuguese, and Italian craft, and Philip appointed as Commander-in-Chief the Duke of Medina Sidonia, the richest peer in Spain, who had failed to distinguish himself against Drake at Cadiz. Froude has described Medina Sidonia as 'good-humoured and entirely incapable,' and Sidonia's letter of February 16, 1588, bears this out. If ever a man were given a job he heartily

CHARLES, SECOND LORD HOWARD OF EFFINGHAM AND FIRST EARL OF NOTTINGHAM

To face p. 112

loathed it was that which fell to Sidonia on the death of Santa Cruz that month.

'I first humbly thank his Majesty for having thought of me for so great a task, and I wish I possessed the talents and strength necessary for it. But, sir, I have not health for the sea, for I know by the small experience that I have had afloat that I soon become sea-sick, and have many humours.' Thus expressing his mind, could any Commander-in-Chief be likely to have the right aptitude for such an important venture?—all the same he had to comply. Drake was no false prophet when he suggested to Walsyngham that he doubted not that before long the Duke would indeed 'wish himself at St. Mary Port among his orange trees.' On April 1, Philip warned Sidonia that the English would endeavour to fight at long distance because of their advantage in artillery. 'The aim of our men,' he instructed, 'on the contrary, must be to bring him to close quarters and grapple with him.' But Philip well suspected that it was going to be no easy task; for, as the Venetian Ambassador in France remarked, Philip 'knows how much consideration ought to be paid to such a fleet as the English fleet, both on account of its size, and also because the English are men of another mettle from the Spaniards, and enjoy the reputation of being, above all the Western nations, expert and active in all naval operations, and great sea dogs.' And the Pope made the plain comment: 'The King goes trifling with this Armada of his. . . . We are sorry to say it, but we have a poor opinion of this Spanish Armada, and fear some disaster.'

Of the Armada's 130 ships, 64 consisted of galleons, seven of them varying in size from 1,000 to nearly 1,300 tons. The *Regazona* of 1,249 tons, a Spanish ship, was the largest of the fleet. The biggest of the English fleet was the *Triumph* of 1,100 tons. Actually, however, there was not much difference in size, for the Spaniards had a curious method of measurement which made their craft to be sometimes half as big again as when reckoned by English rules. The former suffered losses by weather and sickness, so it is doubtful if more than 120 Armada vessels came up the English Channel. Originally there were 9,000 seamen and 17,000 soldiers: total 26,000. But not more than 24,000 reached the Devonshire seas. It must be remembered that at least half of these 120 were transports: for the whole strategy was this. Philip particularly informed Sidonia he was not to seek a battle, and should he fall in with Drake, he was to take no notice of him. The object of the expedition was not to fight on sea but to invade England: Sidonia was to make for the North Foreland, anchor there and get into touch with the Duke of Parma.

Now the latter was in the Low Countries. He had been busily employed for some time sending to Italy for shipbuilders and pilots, and having deep channels made in the Flemish shoals. The intention was that Parma with his army should cross from Dunkirk, where he had been collecting barges and transports, and join hands with Sidonia. A landing was then to be made, England was to be conquered and then Ireland. That was the scheme, that was

the plan of the royal amateur armchair strategist, and this erroneous conception is well worth comparing with the preliminaries and effects of Salamis and Actium. For the error in Philip's plan was the assumption that an army can pass over sea to invade another country whilst the latter still has a fleet in being and undefeated. Everyone knows that in the recent Great European War Germany was prevented from invading our shores simply because the Grand Fleet made it impossible.

Santa Cruz's scheme had been to seize Plymouth or the Isle of Wight on the way up Channel: his admirals who were to serve under Sidonia advocated this, but Philip could not appreciate the point. As to Sidonia, the latter admitted he possessed 'no experience of sea-faring or of war'; his reluctant duty was simply to get through to the eastern end of the English Channel and place himself under Parma's orders. Is it not amazing that such a crude strategical scheme should ever have been perpetrated; that any monarch could be so lacking in imagination as to suppose a fleet of more than a hundred units could reach the North Foreland without an engagement?

Besides the galleons there were galleasses, each rowed by three hundred slaves, and armed with fifty guns. In the Armada only four vessels were larger than the English *Triumph*. Spain had been so fond of oared craft that she had been the last great maritime nation to adopt the galleon. The latter in England denoted a vessel built for war and had been here introduced by Henry VIII. She was low in the waist, with a square forecastle

and high quarter-deck rising to a poop. The wooden bulkheads separating the stern from the waist were pierced for small quick-firing guns. The galleon was in length three times her beam. Originally the galleon had come from Italy, and she became the prototype of the ship that was able to lie in line-of-battle—in other words, a battle-ship. A contemporary Elizabethan picture shows one of the royal English galleons as four-masted, square-rigged on fore and main, with topsails and t'gallants; fore-and-aft rigged with lateens on mizzen and bonaventure mizzen, with a battery of fourteen guns on each side at the two lower decks, in addition to the guns at the stern, on the upper deck, and forward. There was a smaller type of galleon in England which for a time retained oars when requisite.

The galleass was never so highly charged as a galleon, sometimes flush decked and without poop and forecastle. She had both sails and oars, as we saw at Lepanto. She was the prototype of a frigate, whilst the pinnace was of a size between fifteen and eighty tons and the prototype of the corvette or sloop. Pine's well-known engravings show ahead of the Armada a squadron of light craft with either two or three masts, which are either wholly fore-and-aft rigged (with lateen-sails) or square-rigged on foremast only. These evidently were the cruisers for scouting. As to the English gunnery we may get a good idea from the 1,100-ton *Triumph*, whose armament consisted of 9 demi-cannon, 4 periers, 13 culverins, 7 demi-culverins, and 6 sakers. Now the demi-cannon was able to

fire a 30-lb. ball 8,500 feet; the perier could throw a 24-lb. ball 8,000 feet; the culverin could throw a 17-lb. ball 12,500 feet; the demi-culverin had the same range as the culverin, but with only a 9-lb. ball. The sakers were light ordnance, measuring $3\frac{3}{4}$ inches across the mouth. The art of using the heavier guns was still regarded, even in England during 1587, as a 'barbarous and rude thing.' 'We English men,' wrote Bourne that year, 'have not beene counted but of late daies to become good Gunners.'

The shorter guns were placed in the ship's side 'for the ease of the Shyppe,' because of their lightness; because also when the ship was heeling over and the ports had to be shut, it was easier to take in these shorter pieces. Furthermore, these shorter pieces, when in the ports, projected so little from the side that they could not interfere with the working of the ship's sheets, tacks, and bowlines in bad weather. The long guns were placed right aft, coming out of the stern, otherwise they might blow up the counter.

With this knowledge of the strategy, the kinds of ships, and the gunnery we are able to understand that which follows. There were all told 2,500 guns in the Armada, but the Spaniards themselves knew very little about gunnery. Their gunnery ratings consisted of 'Almaynes, Flemings, or strangers,' and these men were exempt from all other duties. Sidonia's flagship was the *San Martin* galleon, the fleet being divided into six squadrons, each with its vice-admiral. The setting out of the expedition shows the lack of good management, for

both provisions and stores were found to be inadequate, and the drinking water was bad. The Armada was to have started in March, but it actually sailed down from Lisbon to Belem at the mouth of the Tagus on May 14. Here the fleet anchored and remained fourteen days waiting for a suitable slant.

Before sailing every man went to confession and to the altar, and no swearing, gambling, or women were allowed in the ships or yards. The galleons were named after the saints, and aboard the *San Martin* flew the sacred banner with the figures of Christ and His Mother. Certainly, to have seen that multi-coloured fleet dropping down the Tagus astern of the admiral must have been an impressive sight. On May 28 the fleet put to sea, but these high-sided galleons were unable to make progress against that northerly wind, and drifted to leeward as far south as Cape St. Vincent, a distance of a hundred miles or more. It was not till June 10 that the wind came south-west, and they were able to make good to the north. But in the meanwhile that water which had been lying in the casks for four months leaked, and that which had been drunk, together with the putrid meat and maggoty bread, afflicted the men with diarrhœa, and soon 500 of them were unfit for duty. On June 19, when oft Finisterre, it came on to blow hard, and many of the fleet made for Corunna, where they arrived battered. The rest had been scattered, but after a while returned, some having got as far north as Mount's Bay, Cornwall.

At Corunna a hospital was established ashore,

fresh food and water were obtained, repairs made, the places of deserters taken by local men, the ships laid ashore to be scrubbed and tallowed. There can be no doubt but that this first experience thoroughly dismayed Sidonia and his men. The Commander-in-Chief now wrote to Philip suggesting that the expedition be abandoned. But on Friday, July 12, all the better for this shore spell, the Armada left Corunna with a southerly wind, and set forth again. Their speed must have averaged about six knots, for by Monday evening they were at the entrance to the English Channel. But now came a shift of the weather, as it often does in July. On Tuesday there was a light northerly air with showers, and the next day the wind backed to the west and blew a gale. The Armada endeavoured to heave-to, but those high-charged galleons were almost out of control, rolling heavily in the seas, but they weathered through. The many-oared galleys, with their low freeboard, were quite unsuitable for the Channel waters, made a fair wind of it, and took shelter in French ports.

On Friday, July 19, they put themselves into fighting order in three divisions, Medina Sidonia being in the centre, the general formation being that of an oblique crescent, with horns at each end. The fleet had found its position by observation of the sun and by taking soundings ; and afterwards, at four that afternoon, they sighted the Lizard, distant nine miles. And now, stretched out in a seven-mile line, the great Armada came sweeping up Channel. That evening Sidonia sent ahead his two fast fly-boats to inform the Duke of Parma in

Dunkirk; but now, as the darkness covered the sea, the smoking beacons along the Cornish coast and on the hill-top blazed forth the alarm that at last the long-expected enemy had come. But through the dark hours that vast fleet was running before the wind, whilst its decorated sails bellied, its sheets and braces strained, and its forests of masts swayed to and fro across the starry sky. At 1 a.m. on Sunday they fell in with four Falmouth fishermen, from whom the Spaniards ascertained that Drake and Howard had already learned of the Armada's approach, and that the English ships had on the Friday evening warped out of Plymouth Catwater, and on Saturday (July 20) had sailed out of Plymouth Sound into the Channel in order to look for the enemy; in fact, at three that afternoon had actually sighted the Armada in the distance.

There is a letter written by Drake 'aboard Her Majesty's good ship the *Revenge* off [the] Start, this 21st, late in the evening, 1588,' in which he informs Lord Henry Seymour, Admiral of Her Majesty's Navy in the Narrow Seas, that 'the army of Spain has arrived upon our coast the 20th of this present, the 21st we had them in chase; and so coming up unto them there hath passed some common shot between some of our fleet and some of theirs . . . the fleet of Spaniards is somewhat about a hundred sails; many great ships, but truly I think not half of them men of war.'

Now the numbers of ships in the English fleet have been estimated varyingly from about one hundred upwards. One account gives the figures as 34 of the Queen's ships and 163 merchant vessels.

Among the Hatfield MSS. is a document which gives the names of all the ships which received payment from Her Majesty for serving against the Armada, and this list shows 123 such craft from the ports of London, Ipswich, Faversham, Sandwich, Dover, Yarmouth, Colchester, Rye, Harwich, Bristol, Hastings, Lynn, Hythe, Plymouth, Chichester, Fowey, Milbrook, Dartmouth, Weymouth, the Isle of Wight, and Aldborough. On the English side there were 8 admirals, 3 vice-admirals, 126 captains, 136 masters, 26 lieutenants, 41 other officers, and from 11,618 to 15,925 soldiers; but owing to the conflicting accounts the number cannot be ascertained with exactitude.

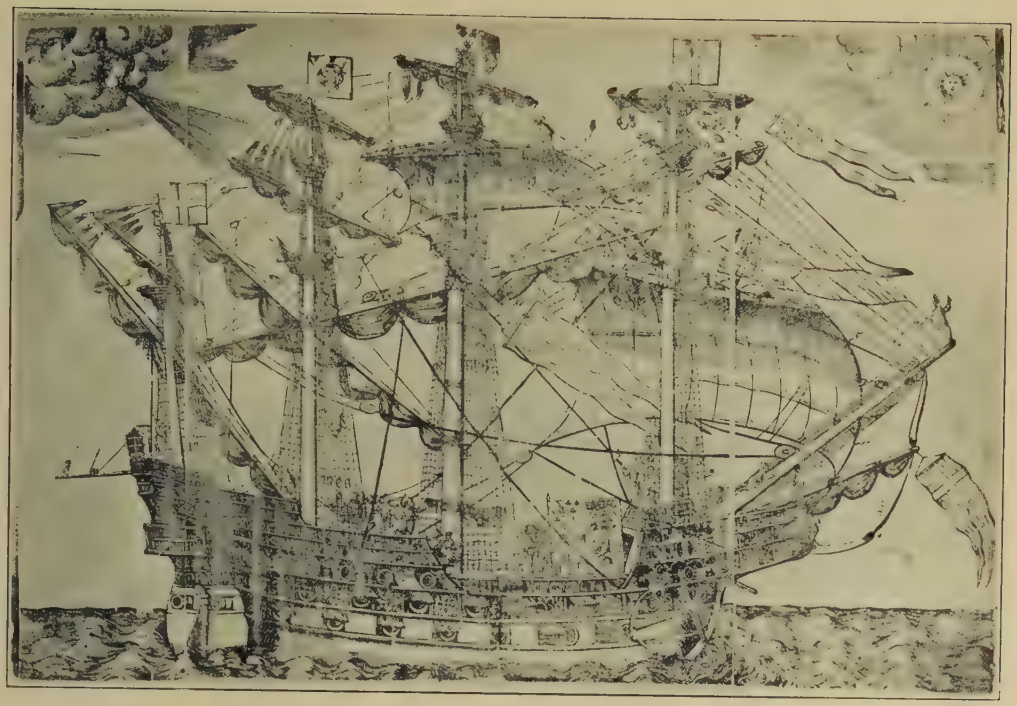
As to the disposition of forces, Charles Howard of Effingham, Lord Admiral of England, had been sent by Elizabeth to the West of England with Drake as his vice-admiral. Lord Henry Seymour, previously mentioned, 'she commanded' (says Camden, the Elizabethan), 'to lye upon the coast of the Low Countries with 40 shippes, English and Netherlandish, and to watch that the Prince of Parma might not come forth with his forces.' The strategy may therefore interestingly be compared with that of the Great War, when Admiral Jellicoe's Grand Fleet was based at the northern end of the North Sea and Commodore Tyrwhitt's force was based on Harwich.

Howard's flagship was the *Ark Royal*, the finest vessel of the Elizabethan navy. This craft had originally been built for Sir Walter Raleigh as the *Ark Raleigh*, but whilst still on the stocks was sold in 1587 for the sum of £5,000 in part payment of a

larger debt which Raleigh had contracted. Howard thought a great deal of the *Ark Royal*, and a few months before the Armada arrived he wrote to Burghley: 'I pray you tell Her Majesty from me that her money was well given for the *Ark Raleigh*, for I think her the odd ship in the world for all conditions, and truly I think there can be no great ship make me change and go out of her.' She was a four-master of 800 tons.

And here let us clear up that fallacy which used to be in the history books of our schoolboy days that the English fleet won this campaign because of the small, nimble auxiliaries which helped the royal ships. This is not true, and here is the clearest possible statement written down at the time: 'I dare assure your Honour,' wrote Wynter to Walsyngham on August 1, 1588, 'if you had seen that which I have seen, of the simple service that hath been done by the merchant and coast ships, you would have said that we had been little holpen by them, otherwise than that they did make a show.' That is the whole truth in a nutshell: the auxiliaries swelled the numbers to an imposing extent, but it was the well-armed royal ships which did the fighting.

According to the accounts of Dutch sailors who served in the Armada, most of Sidonia's ships were badly supplied with artillery, and eighteen pieces was the greatest number aboard any ship, each galleass having only four. Three other interesting items come from this same evidence. Firstly, the English ships were better sailers than those of the Armada, and also the wind was generally south-



THE "ARK ROYAL," ELIZABETH'S FLAGSHIP

To face p. 122

west. Secondly, that the Spanish ships suffered great damage in the fighting, but the English lost not even a mast. Thirdly, there is the statement 'que les Anglois avoient tousjours le dessus du vent'; that is to say, the English were the better tacticians, and always had the weather gage. There is the further remark that Philip had written, ordering the fleet not to return until they had conquered England, or everyone would be hanged.

The passage up Channel of the heavy Armada was slow, if stately; for it was not until 5 a.m. on Sunday, July 21, that they were off Rame Head, Plymouth Sound. Three miles to leeward, off the Mewstone, they sighted eleven of the Queen's ships under Howard, manœuvring to get the weather gage. Between the Armada and the land were counted forty more ships under Drake. Robert Adam's contemporary print shows this quite clearly —Howard's ships standing right out to sea, on the starboard tack, to leeward of, and across, the enemy's bows; Drake's ships making short tacks along the Cornish shore, past Whitsand Bay and Looe, but then bearing away and running down to windward of the Armada's crescent formation, while Howard went about on the port tack, bore away, and was also in a position to attack the enemy's rear. Thus from the very first the enemy were outwitted by superior English seamanship. There began a running fight, and this continued on the 22nd; but a more general though indecisive engagement took place on the 23rd off Portland. On Thursday the 25th a fierce battle took place at the back of the Isle of Wight, and two days later

the Armada reached Calais Roads, by which date the entire English fleet was concentrated.

Now we cannot do better than supply details from the actual letters written by the English admirals at the time. That which strikes us forcibly is the leisurely, protracted nature of the operations as compared with the speedy devastation in modern naval warfare with improved guns and shells and explosives. But the English guns were very active, for by Tuesday they were running short of ammunition, as will be seen from Hawkyns's letter, below, to Walsyngham. Drake in his letter also to this same personage refers to this same need in a postscript: 'There must be great care taken to send us munition and victual whithersoever the enemy goeth.' Incidentally it seems to us lamentable that Elizabeth should have kept her ships so ill-supplied in these two respects, and that her officers had so frequently to write complaining submissions that this might be remedied.

'From the sea, aboard the *Victory*,' did Sir John Hawkyns report of the fighting against the Armada in the Channel. 'We met with this fleet,' he says, 'somewhat to the westward of Plymouth upon Sunday in the morning, being July 21, where we had some small fight with them in the afternoon. By the coming aboard one of the other of the Spaniards, a great ship, a Biscayan, spent her foremast and bowsprit; which was left by the fleet in the sea, and so taken up by Sir Francis Drake the next morning. The same Sunday there was, by a fire chancing by a barrel of powder, a great Biscayan spoiled and abandoned, which my Lord

THE SPANISH ARMADA

Coming up Channel, between Fowey and Plymouth Sound. The English fleet are seen sailing out from Plymouth on a wind and getting to windward of the enemy.

To face p. 124

(Charles Howard) took up and sent away. The Tuesday following, athwart of Portland, we had a sharp and long fight with them, wherein we spent a great part of our powder and shot, so as it was not thought good to deal with them any more till that was relieved. The Thursday following, by the occasion of the scattering of one of the great ships from the fleet, which we hoped to have cut off, there grew a hot fray, wherein some store of powder was spent; and after that, little done till we came near to Calais, where the fleet of Spain anchored and our fleet by them; and because they should not be in peace there, to refresh their water or to have conference with those of the Duke of Parma's party, my Lord Admiral, with firing of ships, determined to remove them; as he did, and put them to the seas; in which broil the chief galleass spiled her rudder, and so rode ashore near the town of Calais, where she was possessed of our men, but so aground as she could not be brought away.'

The ship which Hawkyns mentions as having carried away the foremast and bowsprit was the 1,200-ton *Capitana*. It was the Vice-Admiral Michael de Orquendo's ship—one of the largest of the fleet—which burst into flames and was captured. Luckily her gunpowder was saved, and this came in very useful to the English, whose supplies had been so parsimoniously limited by Elizabeth. Off Portland the wind had veered from south-west to north, and, for a time, this gave the Spaniards the weather berth until the Englishmen regained it presently. From morning till night the two fleets

fought without intermission with shot both great and small. 'This,' says the Hakluyt account, 'was the most furious and bloodie skirmish of all.' The Plymouth squadrons were now being strengthened by vessels from out of the principal English ports, and with now over a hundred units, the fleet was divided up into four squadrons, under the four admirals, Howard, Drake, Hawkyns, and Frobisher. In this engagement off the Isle of Wight the *Ark Royal*, *Lion*, *Elizabeth Jonas*, *Victory*, and *Galleon Leicester* fought with great valour, and Frobisher greatly distinguished himself.

Having got through the English Channel as far as Calais, Sidonia was now at length only a few miles short of Dunkirk and in hopes of getting in touch with Parma. The latter, however, 'fore feare of five and thirtie warrelike ships of Holland and Zeland,' which had been enjoined 'not to suffer any shippe to come out of the Haven,' was unable to join up with the Armada. Nor, indeed, had he there embarked his men, who presently deserted. Seymour, who had been waiting to guard the Thames estuary, in the meantime with his thirty ships joined Howard's fleet and also anchored close to the Armada. Up till now there had been a week of indecisive fighting and the enemy had succeeded in getting through the Channel; and so long as that Armada remained, so long must exist the invasion menace. Therefore, acting on instructions from the Court, Howard endeavoured to drive the enemy from its anchorage. He chose out eight of the worst conditioned English ships, dismantled them, and filled them with powder, pitch, and brimstone.

FIRESHIPS AMONG THE ARMADA OFF CALAIS

To face p. 126

Everyone who has handled craft off that coast knows what a strong tide sets through past Calais. Howard waited till wind and tide were both in the same direction, and on the night of Sunday, July 28, sent these fire-hulks to leeward, 'which fire in the dead of the night put the Spaniards into such perplexity and horrour' that they in their panic were compelled to slip or cut their cables, hoist sail, and go down the wind. It was during this excitement that the biggest of the galleasses lost her rudder and was swept by the tide on to that treacherous shore. Those who hoped to save themselves were drowned. Three hundred galley slaves and four hundred soldiers had been her complement, and fifty thousand ducats were found by the Englishmen who went to her from pinnaces and other small craft.

Howard's fleet followed the escaping enemy, the wind and tide setting towards Gravelines, where the English were to windward and on the 29th fired at them fiercely, so that they were driven right past Dunkirk. Thus some Spanish ships sank, some had to be abandoned, others were wrecked further along the coast at Blankenberghe. Seymour was sent with the Dutch contingent to watch the Flemish coast in case Parma should put to sea. But the fleeing Armada went off to the N.N.E. and presently altered course to N. by E., thus disappearing well away from the neighbourhood of the English Channel. The English thought they were making for Norway and Denmark, but the enemy made for the north of Scotland. The routed Armada was pursued till about the latitude of

Aberdeen, but then, being in great need of provisions and powder, the English put about and came south to Harwich. The plans of Philip had been utterly negatived, his fleet was not the invincible affair that it had been called. But even on the 29th off the Flemish coast Drake realized that the great task for England was already accomplished. 'God hath given us so good a day in forcing the enemy so far to leeward,' he wrote to Walsyngham, 'as I hope in God the Prince of Parma and the Duke of Sidonia shall not shake hands this few days; and whensoever they shall meet,' he added with delightful satire, 'I believe neither of them will greatly rejoice of this day's service.' And two days later he wrote again: 'There was never anything pleased me better than the seeing the enemy flying with a southerly wind to the northwards.'

Wynter wrote down some interesting particulars about that Gravelines fight from which we know that they were off there about 9 a.m., the enemy being still in the formation of a half-moon, admiral and vice-admiral being in the centre, whilst on each wing were the Portuguese ships, galleasses, and other craft. Wynter made for the starboard wing and opened fire when within six-score paces of them. This wing then withdrew to the main body in the Armada centre, and in so doing four ships fouled each other. Some Spaniards leaped into the sea, but were picked up and taken prisoners. This day's fight continued from 9 a.m. till 6 p.m., the enemy keeping in close formation and good order, and receiving great damage. As to the amount of

SIXTEENTH-CENTURY WARSHIPS

A late Elizabethan ship in the foreground.

To face p. 128

ammunition poured in, Wynter says, 'that out of my ship there were shot 500 shot of demi-cannon, culverin, and demi-culverin; and when I was furthest off in discharging any of the pieces, I was not out of shot of their harquebus, and most times within speech of one another.'

Howard reported that in this Gravelines fight 'we sunk three of their ships, and made some go near the shore, so leak, as they were not able to live at sea . . . notwithstanding that our powder and shot was well near all spent.' And yet on July 31 Elizabeth with her limited knowledge of tactics actually had the temerity to send through Howard a memorandum to Drake desiring to be informed, 'What causes are there why the Spanish navy hath not been boarded by the Queen's ships? And though some of the ships of Spain may be thought too huge to be boarded by the English, yet some of the Queen's ships are thought very able to have boarded divers of the meaner ships of the Spanish navy.'

The scattered forces of Philip now badly in need of fresh water, battered by the Elizabethan guns, damaged by gales, shipping cruel seas, and sometimes hindered by head winds, succeeded in passing between the Orkneys and Shetlands and then down the west coast of Ireland, and next shaped a course for the Bay of Biscay; but a south-westerly gale took some of them to the Irish coast, where many were drowned, 'and divers slaine by the barbarous and wilde Irish.' Two more ships were blown up and wrecked in Norway; others, after circumnavigating the British Isles, were again driven up

the English Channel before a westerly wind, some being captured by the English, and others by the inhabitants of La Rochelle. The nett result was that of all those one hundred and thirty ships which had come down the Tagus that day in May, there returned to Spain only fifty-three. The Duke of Medina Sidonia had the misfortune to come back alive in one of them. He was deposed from his high office, forbidden the Court, and ended his days as a disgraced and discredited man.

The junction with Parma had never been made because of the persistent pressure by the English fleet, whose seamanship and gunnery and tactics were superior, even if there never occurred that one decisive battle which would have brought the whole proceedings to a sudden stop. It took, on the contrary, over a week to drive the Armada further and further away; and at the very moment when it was off Dunkirk the enemy was being impelled all the faster beyond the port where Parma was waiting.

The Armada campaign ended by crippling, though not destroying, Spanish naval power at the time of its zenith. On the other hand, it gave to English seamen a confidence and a prestige which they had never possessed before among European nations. And even if in the following century a period of relapse and decadence set in, yet the effect of this victory over Spain decided once and for all the future freedom in the development of the English people and nation as a great maritime power whose fortune must rest on the seas. Thus, without even one spectacular great fight it is possible to win a war.

CHAPTER V

BATTLE OF THE SAINTS, 1782.

As the battle of Lepanto showed the dividing line between the period of the war galley and that of the war sailing ship, so the Armada campaign represented the transition (but in its very early stages) between pêle-mêle fighting and real tactics. It was, however, during the seventeenth century that the line-abreast end-on fighting was to give way to that much more scientific theory and practice of employing warships in line-ahead.

The reason was simple. The vessels existed not as ships but as gun-platforms, and it was useless to go on piling deck above deck with ordnance unless those guns were used to a right purpose. Now, seeing that most of the guns could be fired only from the side, it followed that the best way to dispose a squadron or fleet was so that each ship could fire her broadside; and this meant that the greatest concentration of fire could be assured when ships were formed in single line-ahead, following the leader. At the close of the Tudor period this idea was just beginning to be appreciated, but as a result of the Anglo-Dutch wars it was demonstrated beyond doubt in hard hostilities.

During the time of Elizabeth no regular order of battle had been laid down by those in authority: the Queen herself, as we have seen, could not

conceive tactics superior to the ancient boarding practice. And Howard's fleet had twice been in action before it was organized into squadrons, but English admirals had begun to realize that the future was concerned with the use of artillery rather than the sword; and as we know from contemporary illustrations the Queen's ships did use the line-ahead formation when standing out of Plymouth Sound on the starboard tack.

But it was not until 1653 that the use of this formation was enjoined. During the period 1648-1652 certain fighting instructions were issued which ordered that on sighting the enemy the English vice-admiral and rear-admiral respectively were to form their ships into wings and to come up on either side of the admiral and keep close to him. But on the admiral signalling, each ship was to engage that enemy ship which was nearest, the admiral engaging the enemy's admiral. Up to the beginning of the Anglo-Dutch wars no instruction as to being in line-ahead as a battle formation had been laid down: the idea of one ship attacking her opposite number was as old as the earliest Mediterranean fighting in the primitive galley days.

But in the spring of 1653 the important orders were issued to the English fleet that ships were to endeavour to keep in line 'with the chief' so as to 'take the best advantage they can to engage with the enemy.' And when the windward station has been gained, the line-ahead is to be formed 'upon severest punishment.' This shows most clearly the cleavage between mediæval and seventeenth-century naval thought: the line-ahead formation is insisted

upon. And, a month before the second Dutch war, orders were issued by the Earl of Sandwich, Lord High Admiral, providing for the formation of a line-ahead to port or starboard from line-abreast. 'If the enemy have the wind of us and come to fight us, the commanders of His Majesty's fleet shall endeavour to put themselves in one line close upon a wind,' and the ships were, in reasonable weather, to keep half a cable's length apart from each other.

Thus one result of these wars with Holland was the knowledge learned in the tactical use of gun-armed ships, and therefore we are now in a period vastly different from the Tudor times. But what an unsatisfactory thing that eighteenth-century mind was! It was a time when morals were corrupt, when the reaction from Cromwellian puritanism had brought about a baseness in public and private affairs, and so in matters pertaining to the Navy. It was a time when men were slave-bound to convention, when they thought more of the literal application of rules than of the purpose at the back of any instructions. It was a period when formalism in religion, in politics, in art, in literature, in naval architecture, and in so many other things seemed to leave no room for pure inspiration. No wonder that when the Romantic school dawned in literature already it had its opportunity waiting.

By the year 1713 Britain was ruler of the seas, but then came that terrible time of decadence when the Navy became grievously neglected, when the ships were badly built, badly designed, badly arranged in regard to their artillery; when these

vessels received both inferior workmanship and indifferent material; when the conditions at the dockyards were unsystematized and chaotic. This was the time when the crews were inhumanely treated and (as in Anson's voyage round the world) were both difficult to obtain and then died like flies because of the unhealthy ship conditions. Formalism, conventionalism, lack of imagination, a total absence of inspiration: that was the eighteenth-century character until the last twenty years set in.

And so it was in regard to the tactical conclusion which had been inherited from the Anglo-Dutch hostilities. Two distinct schools eventually grew up—the one advocated the strictly formal tactical method; the other, however, was to come in at last permitting risks in a fight to be undertaken through individual initiative. But the former was to hold sway through most of this depressing eighteenth century, so that a naval officer considered it almost better to fight and lose a battle 'according to instructions' than win one on disapproved principles. It was all as prim and perfunctory as a minuet; as stiff as the manners ashore were insincere.

Now to flout public opinion, knowing it to be wrong, is one of the very highest acts of moral courage. But to break with a fallacious service tradition in the hour of battle shows both moral and physical courage combined. And whatever may be said in condemnation of Rodney's private life ashore, we must extol him for his cool intrepidity, his wise daring in breaking away from the fetters of conventional fighting methods. If it was

Hawke who first showed a contempt for the tiresome trammels of tactical formalism, it was Rodney who gave the new idea a real existence; and he did it at a great historical crisis, when failure in battle would have been one of the greatest disasters to his country. To employ the words of the then First Lord of the Admiralty, 'the King's whole dominions' were under his care in this poignant period.

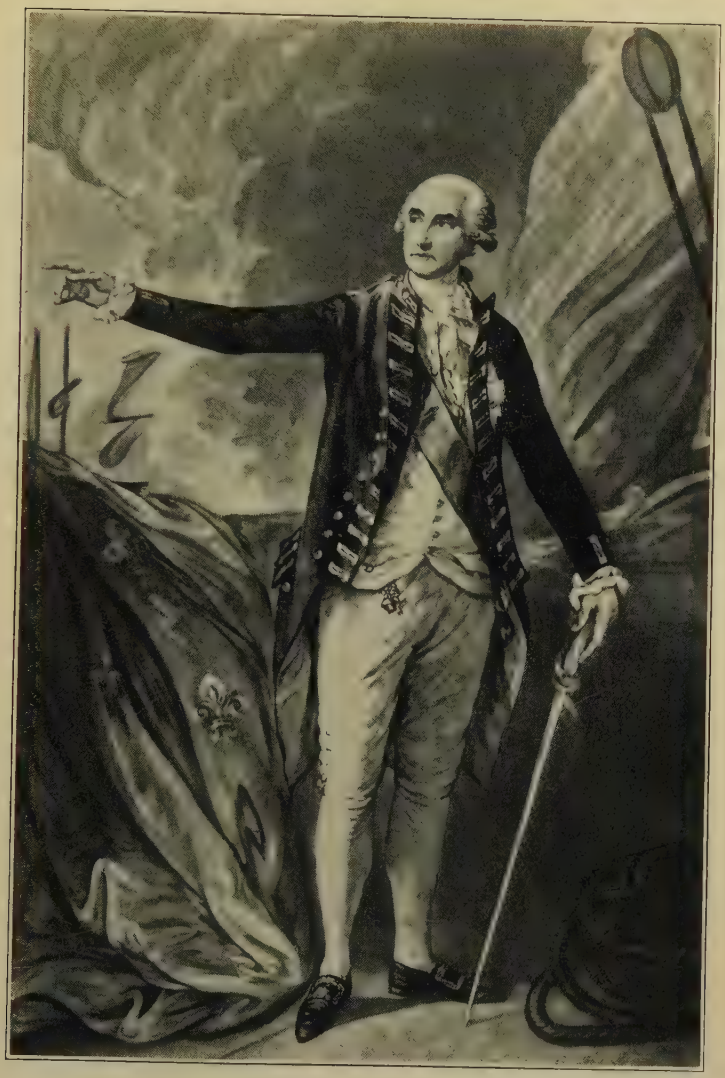
For, in this battle of the Saints, Rodney showed that he had the spirit of a big man who can take a great risk on a mighty occasion. A stern disciplinarian regardless of officer and man, he could disobey tradition in order to break the enemy's line. And yet, for all that, he was lacking in that fiery energy, that Nelsonian thoroughness to complete what had been so well half-finished. It was of this battle of the Saints that the victor at the Nile himself remarked that it would have been 'the greatest victory, if it had been followed up, that our country ever saw.'

But Rodney in this famous battle saved England, and if history can still say that of a man nearly a hundred years after his death, his life cannot have been inglorious. Still, his character is a strange contradiction that you cannot easily pigeon-hole under one category. A typical blunt, unbending seaman of his age, full of courage in the presence of the enemy, he had been compelled to fly to France from a bailiff's warrant. A great admiral who could rule his fleet with an iron will, he was incapable of controlling his own private affairs. A cautious rather than dashing tactician, he was a

reckless spendthrift. Resolute afloat, he was irregular in his habits ashore. And there is this irony, too. After being exiled to France, there to evade the attentions of his creditors, it was only through the assistance of a French nobleman that he obtained a loan of a thousand louis and settled with those to whom he owed; but this meant that France's enemy, England, was to have back the man who was to defeat the French fleet.

Rodney is to-day recognized as the greatest of all tacticians between the times of Blake and Nelson, although Hawke was barely inferior. When Rodney sailed, Lord Sandwich had affirmed that the fate of the Empire was in his hands, and while he was crossing the Atlantic reverses were to befall our nation; but he was just the right man in the right place at the right occasion, who refused to be dismayed. And within a day or two of his arrival at Barbadoes, he did not hesitate to insist that he was in a condition to put a stop to the enemy's conquests. It was the confidence of a strong man in the hour of grave national danger rather than an empty boast, and the position of affairs was this.

The West Indies required to be plucked from immediate peril. England was suffering the risk of ceasing to be any longer mistress of the seas, a position which she had already been enjoying. For in North America the surrender of Yorktown had taken place, and thus victory and the independence of the United States were effected. This English downfall roused both France and Spain to renewed efforts against England's position as the leading maritime country, and they concentrated their



LORD RODNEY

To face p. 136

efforts towards annihilating British power in the West Indies in order to follow up the injury which had been wrought in America by English colonists.

During the winter of 1781 the French had despatched Admiral de Guichen with a powerful reinforcement for De Grasse, who was already in those waters. Rodney did not reach Barbadoes until February 19, 1782, but already Hood had with a force of eighteen line-of-battle ships encountered the French fleet under Count de Grasse consisting of twenty-three sail. It was at Barbadoes that Rodney and Hood joined forces and discussed the plan of campaign and then made for Martinique, Rodney being in supreme command with a fleet of thirty-six sail. 'When the enemy's force by sea is superior to yours, and you have many remote possessions to guard,' observed Admiral Kempenfelt on January 6, 1782, 'it renders it difficult to determine the best means of disposing of your ships. . . . The enemy I conceive at this time have two grand designs against us. The one, the conquest of our West India Islands; the other, at home . . . a formidable descent upon Great Britain. . . . They will with some reason conclude that one or other of these designs will succeed, well knowing that we cannot, by our naval power, guard against both; and that if we employ a force sufficient to defeat their design in one place, we must necessarily leave the other exposed to them.'

That had been the strategical position at the time, and the rich West Indies were then—as

undoubtedly they will be again at some future date—a most tempting bait. As to the matter of tactics, before we see the two fleets of Rodney and Grasse opposed to each other, let us try and get into the minds of the two rival admirals. Rodney believed strongly and firmly in the principle of concentration. Writing in October, 1781, criticizing the action of Graves in having allowed the French squadron from Rhode Island to join De Grasse, Rodney had asked: 'Ought any man, after the notice he had received, to have separated his squadron of line-of-battle ships? The whole should have been kept in a body, and always ready to act at a moment's warning . . . till the campaign was over.' Of De Grasse we have an opinion by that contemporary Paul Jones, that enemy of England and 'father' of the American Navy, but none the less one of the greatest sailors in the eighteenth century. To the United States Government in 1782 Paul Jones wrote of De Grasse after the battle of the Saints: 'France lost in him one of her greatest naval tacticians, and a man who had, besides, the honour (in 1773) to invent the new system of naval signals. . . . A captain of the line at this day must be a tactician. A captain of a cruising frigate may make shift without ever having heard of naval tactics. Until I arrived in France . . . I confess I was not sensible how ignorant I had been, before that time, of naval tactics.' For the science of governing a fleet's operations depended on being able to send orders, questions, answers and information without confusion or misconstruction and with great

celerity. In that respect the French were superior to us.

Already in the year before the battle of the Saints Kempenfelt (who was the greatest authority in the English Navy on signalling at that time) had remarked: 'Signals should be simple, clear, and easily discernible. I don't know any more perfect,' he admitted, 'than those invented by M. de la Bourdonnais.' And of Kempenfelt Paul Jones wrote: 'Lord Howe has, indeed, made some improvements by borrowing from the French. But Kempenfelt, who seems to have been a more promising officer, had made a still greater improvement by the same means.' Only two years before the battle of the Saints had Kempenfelt complained of the British tactical neglect. 'I believe you will, with me,' he wrote to Middleton, 'think it something surprising that we, who have been so long a famous maritime power, should not yet have established any regular rules for the orderly and expeditious performance of the several evolutions necessary to be made in a fleet. The French have long since set us the example. They have formed a system of tactics, which are studied in their academies and practised in their squadrons. . . . In fine, if you will neither give an internal discipline for your ships, nor a system of tactics for the evolutions of your fleet, I don't know from what you are to expect success.'

Such, then, was the naval mind on the eve of the battle of the Saints. It remains now only to afford some idea of the ships which took part. Here, too, we had learned a great deal from the French, who

had evolved a type of ship which in the worst weather would provide the best platform for the longer range guns now in use. By scientific study, by experiment, the dimensions and lines of the French capital ships had become better than ours. A ship-of-the-line was what we should call to-day a capital ship or battleship, one capable of taking her place in line-of-battle, as distinct from the lighter cruiser or corvette. An Admiralty list of 1779 gives first, second, third, fourth, fifth, and sixth rates, as well as sloops. The first-rate had for principal armament 110 guns, the second-rate mounted 90 or 98 guns, the third-rate 74 or 64 guns. And if we should wish to picture, say, a two-decker, we should have seen a three-masted vessel, with figure-head, quite a lot of tumble-home; heavy, picturesque stern-galleries, a long quarter-deck with poop above, and forecastle.

The hundred-gun battleship of over 2,000 tons was built with very substantial timbers and planking, and rigged with square-sails, which were huge wind-bags, so that the design neither of hull nor of canvas enabled her to be in the least degree a handy vessel; she was, in fact, a cumbrous creature, majestic and imposing, but a moderately mobile platform for many guns. The mizzen still set the old lateen-yard, which had come down from the Mediterranean galley; but staysails had been introduced, thanks to Dutch influence, and during this century triangular headsails had also been adopted. A square-sail was still retained in suitable weather below the bowsprit. The sail on the lateen-yard had now become rectangular in shape. By

1747 the steering-wheel had come into use in ships of the Royal Navy. Corvettes had less freeboard, lacked the high quarterdeck, were shiprigged, and carried less than twenty guns. According to James, the first genuine frigate to be built in England was the *Southampton* of 1757; that is to say, the first English ship constructed to carry her guns on a single whole deck, a quarterdeck, and a forecastle—the true characteristic of a proper frigate. And then in 1780 the 38-gun frigate had for the first time appeared as a British-built class. But the influence of the French naval architects in the development of the frigates is very noticeable. Rodney employed his frigates as cruisers or scouts, and a week before the battle he wrote that he had 'several frigates between Martinique and Antigua at the very time the enemy made the islands, and yet no one saw them.'

So, on April 5, 1782, we find Rodney aboard his flagship *Formidable* at St. Lucia. 'The whole business of the fleet is transacted here,' he says. 'The English harbour is of little use, and in its present situation not to be trusted with the naval storeships. For their better security I have directed Rear-Admiral Drake to keep them at St. Lucia.' And as showing that Rodney fully realized the deep import of his task let us quote his own words again: 'The great event that must restore the empire of the sea to Great Britain is near at hand; let me but live to hail my most gracious monarch sovereign of the ocean, and then my happiness will be complete.'

Now, having sailed for Martinique, as already

mentioned, Rodney was disappointed to find that De Grasse with his fleet was safe in Fort Royal bay, where he remained for some weeks. Rodney then withdrew to St. Lucia, as he states above, but left Sir Samuel Hood and Drake with their respective divisions to watch lest De Grasse should come out of harbour. There was a large Spanish force at Cape François, St. Domingo, which De Grasse had ordered to join up with the French. The aim, then, would be to conquer Jamaica. But Rodney was expecting this design, and by a chain of well-placed frigates maintained constant communication with Hood and Drake. So it was, then, that on April 8 the frigates were able to send along the signal that the enemy's fleet was putting to sea, and on that same day Rodney collected his ships and went forth.

On the 9th Hood's division had—to quote his own report—'two actions, at a short space of time distant one from the other, with the whole of the enemy's van and centre, between the islands of Guadeloupe and Dominica, while the greatest part of our centre and the whole of the van were becalmed under the latter; and had De Grasse known his duty he might have cut us up by pouring a succession of fresh ships upon us as long as he pleased; but being very roughly handled and to windward, he hauled off, and our fleet joined in the evening. . . . The next morning the French ships were very far to windward. Sir George Rodney carried a stiff sail all day, neared them very much by sunset, and intended to have carried a plain sail all night; but by a blunder in Charles Douglas, in making the

THE BATTLE OF THE SAINTS

To face p. 142

signal for the leading ship to shorten sail, which was under her topsails only with the mizzen topsail aback, the fleet lay-to the whole night; at least the centre and rear did so; Captain Byron . . . was employed the whole night in carrying messages between the chief and third in command. At daylight, only a few of the leewardmost part of the French fleet could be seen from the masthead.'

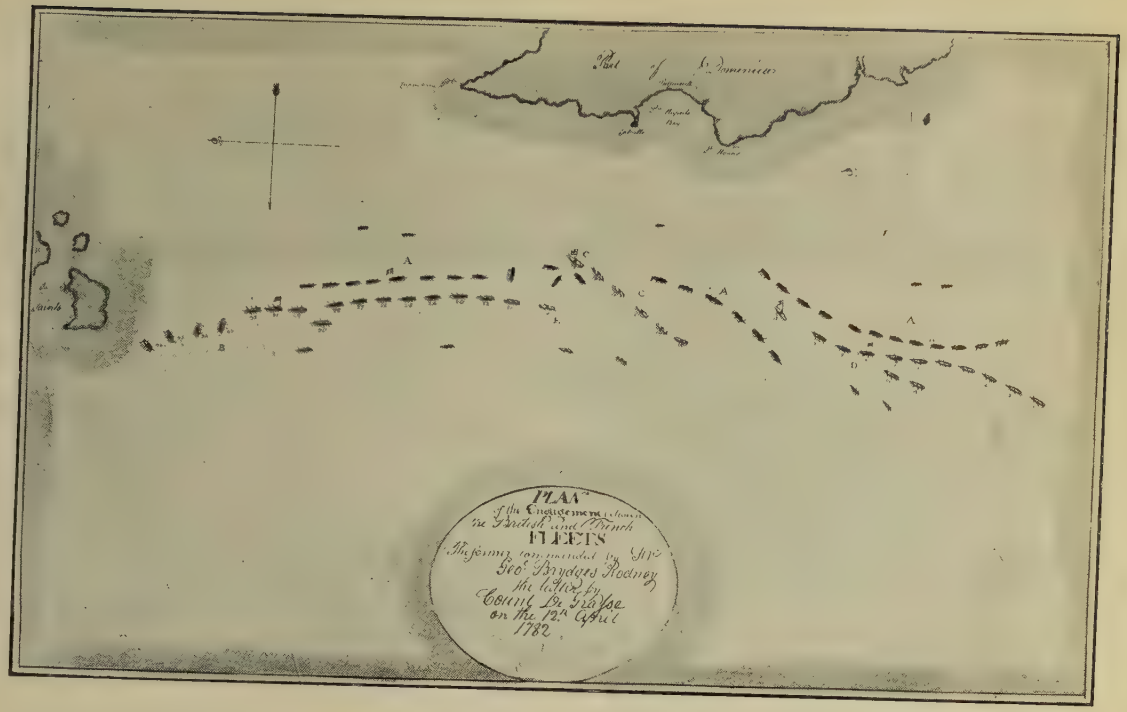
When day broke on April 12 Rodney had gained the weather gage of De Grasse, and at 5.30 a.m. the English fleet was on the starboard tack, distant fifteen miles from the group of islets off Dominica called the Saints, which bore from Rodney's force N.N.E., the wind now being from E.S.E., but light, variable, and flukey. The battle was to take place in the twenty-three mile wide channel which separates Guadeloupe from Dominica. We have to imagine the French fleet ten miles to the north-east, heading south on the port tack, but much scattered over an area of eight miles. Rodney's fleet on the starboard tack was heading E.N.E., the French having a truer wind with a little more east in it, though presently it veered to E.S.E., and enabled the French to get to windward. Both fleets were now in line-ahead, the two lines converging, the French line heading a little to the east of south, Rodney's heading about north-east.

Certainly it was one of those days when a flukey air might be friend to either side, and it took more than a zephyr to get those great wooden walls moving over the sunny West Indian waters even under such clouds of white canvas. Hood admits our good fortune in the variable breeze. 'We

again worked to windward,' he says, writing only one day after the battle, 'and next morning, by a most fortunate shift of wind, we could look up to three or four of the enemy's ships, which brought the whole down to succour them, and they formed on the contrary tack to our fleet.' Every ship on both sides was engaged. Paul Jones, though a prejudiced commentator, was at least a contemporary. And writing that same year a memorandum to the United States Government he remarked: 'The unfortunate defeat of Count de Grasse was owing more to the unfavourable circumstances of the wind coming ahead four points at the beginning of the battle, which put his fleet into the order of *échiquier** when it was too late to tack, and of calm and currents afterwards, which brought on an entire disorder.'

Paul Jones also refers to 'the vast superiority of Rodney, who had forty sail-of-the-line against thirty, and five three-deckers against one. By the account of some of the French officers, Rodney might as well have been asleep, not having made a second signal during the battle, so that every captain did as he pleased.' But it is here that this ex-master mariner shows his prejudice too strongly. For the British fleet consisted of thirty-six sail-of-the-line, and the French had thirty-four. This numerical superiority was more than counterbalanced by the superior size of the French vessels. This is confirmed by a letter written after the battle by Rodney to his wife. 'Comte de Grasse, who is at this moment sitting in my stern-gallery, tells me

* Literally, 'chess-board.'



BATTLE OF THE SAINTS: PLAN

This plan shows the battle in action. AAA indicate the French fleet. C shows Rodney leading the centre division of the British fleet through the French line. B shows the British van wearing, after passing the French line. D is Hood's rear division. E is the "Duke" disabled.

To face. p 144

that he thought his fleet superior to mine; and he does so still, though I had two more in number. And I am of his opinion, as his was composed all of large ships, and two of mine only sixty-fours.'

A reference to the accompanying plan will show the two lines of fleets on opposite courses. Rodney was in the centre of his fleet, Hood's division in the rear, the British van was further to the north near the islets. The letters AAA show the French fleet on the port tack heading south. The middle A indicates where their line was broken by Rodney, C shows Rodney leading his centre division through the French line, and B is the British van wearing after passing the French rear. The letter D represents Hood's division in action with the French van: E is the *Duke* disabled and forced to leeward.

For the two converging lines had at last met, and the English fleet to the leeward must crash into the enemy between the latter's sixth and tenth ships. At 7.40 a.m. firing had already begun, and the ninth French ship was blazing away at the British *Marlborough*. It was a marvellous sight when these seventy vessels, stately, slow-moving, stretched across that calm tropical sea, and the twelve-hour battle that ensued was to be for a period longer than any which had ever taken place between the two rival nations. There was that great moment of suspense when naval modern tradition and approved formalism demanded that Rodney should keep his line intact and fight according to the old ship-versus-ship methods. Until about noon the two fleets lying in parallel

lines did keep up a ceaseless fire in what was practically a calm. But then came a freshening breeze, and this allowed Rodney to put in effect those tactics in which he had long believed.

He perceived an opening in the enemy's line, and realizing his grand opportunity, swung round at right angles to starboard, took the *Formidable* and his five other ships and broke through the French line to the rear of De Grasse's division, the treacherous wind having suddenly veered to the south. The leading French ships were now cut off, and nearly half their fleet placed between two divisions of Rodney's. For Hood was at the other end of the line and was able to render him the greatest assistance in isolating that portion of the enemy now cut off. Let us quote Hood's own words: 'So soon as my division (which was then the rear one) had passed the sternmost of the enemy's ships—which it was a considerable time in doing, it being almost calm—I perceived the signal for the line was hauled down; upon which I got my boats out, and towed the ship round towards the enemy; and made all the sail I could (for we had, immediately after, a little breeze), and threw out the signal for every ship of my division to do the same; and we took the *César*, *Ardent*, and *Ville de Paris*. Observing the *Ville de Paris* to edge towards the *Barfleur*, I concluded De Grasse had a mind to be my prisoner, as an old acquaintance, and therefore met his wishes by yawing towards him. As soon as I got within random shot he began to fire upon me, which I totally disregarded till I was satisfied by firing a single

gun from the quarter-deck that I was fairly within point-blank, when I opened such a tremendous fire as he could not stand for more than ten minutes, when he struck. This was at sunset, and my boat had scarcely got aboard, when Sir George made the signal and brought-to, and continued to lay-to the whole night.'

The French had never been able to re-form their line, and Rodney's tactical daring had brought about such a condition of affairs that it was only a question of time and gunnery before the enemy should be defeated. Six of the French ships became prizes, and De Grasse's flagship, *Ville de Paris*, which hauled down her colours to Hood's *Barfleur*, was no ordinary capture. She was a very exquisite ship, which had been a present to Louis Quinze from the City of Paris, and was the pride of the French navy. She mounted 106 guns and carried 1,300 men. And the reader may care to know that the face of the clock which used to hang on her poop is still preserved in the Royal United Service Museum.

The victory utterly stopped all idea of capturing Jamaica, and it restored Britain to her position as mistress of the ocean. Had the fight resulted otherwise, we should have lost most certainly the West Indies and all hope of colonial expansion: English history would have taken a different trend. The battle of the Saints is therefore one of the decisive engagements in the progress of the world. It was Rodney's good fortune to be favoured by the varying wind, but the point is that he took every advantage of this, and put into execution

those original tactics which he had long considered. And yet they were not really original, but rather a reversion to a manœuvre which had been used in Cromwellian times, but, through hard, uninspired conventionalism, had fallen into desuetude during the eighteenth century. But Rodney had done more than that: he had revived those sound tactics which were to make it possible for Nelson afterwards to act as he did at Trafalgar.

The object of this volume is not to paint a picture of smoke and blood and dying men. We have no desire to present the horrors of battle, but to consider the mind and methods, the strategy and tactics, the conditions and circumstances. But the battle of the Saints was no pleasant sight, for the decks of many ships were veritable shambles with dead and bleeding, limbless trunks. In that fight perished a thousand Englishmen, and three times that number represented the French losses. And it is interesting to note, in passing, the lesson that the worst possible place for an army of invasion is aboard ships of war about to give battle. In some of the captured ships was the principal part of that land force, with the whole of the artillery and ammunition and the money that were to have been used in capturing Jamaica.

But Rodney has been the subject of much criticism, and his contemporaries did not scruple to express their opinions. The defeated French fleet fled towards San Domingo, and Rodney was reluctant to go in pursuit, but detached Hood with the main force a day or two later. 'After the glorious business of yesterday,' wrote Hood on

April 13, 'I was most exceedingly disappointed in and mortified at the Commander-in-Chief. In the first instance for not making the signal for a general chase the moment he hauled that down for the line-of-battle, which was about one o'clock; had he so done, I am confident we should have had twenty sail-of-the-line before dark; instead of that, he pursued only under his topsails, the greatest part of the afternoon, though the flying enemy had all the sail set their very shattered state would allow. . . . But why he should bring-to because the *Ville de Paris* was taken is not to be comprehended. At sunrise this morning I went on board the *Formidable* to pay my compliments, and . . . I so far prevailed upon Sir George to . . . push on in search of the enemy.'

As to Rodney's tactics in breaking De Grasse's line, the very manœuvre, whilst being hailed on one side as the sure method in future for ensuring naval victory, was strongly opposed by such a man as Beatson, who remarked that 'the French line was completely deranged by the change of wind *alone;* and . . . it may be doubted whether it [breaking the enemy's line by six ships] was a fortunate evolution. If Admiral Rodney's fleet had kept a connected line-of-battle ahead, sailing large across the bows of the French ships . . . it is highly probable that the fleet of France must, upon the whole, have sustained much more damage.' And this, of course, is more in accord with the modern tactical aim of crossing an enemy's T.

But we have to remember the spirit of the times, and that Rodney was not in the vigour of his

prime, but a gouty old admiral, who suffered from bad health. The plain fact remains that he conquered not merely a stale naval attitude, but the enemy; and there are few Commanders-in-Chief, even down to and including the battle of Jutland, whose conduct of a battle has been heartily approved by all the experts. But he was created for his services a peer, with a pension on both the English and Irish establishment, that on the English one being annexed to the title until quite recently in this twentieth century the matter was mentioned in Parliament. Hood was rewarded with an Irish barony, and it was at Jutland that Rear-Admiral the Hon. Horace Hood, son of the fourth holder of the title, went down gallantly in the battle-cruiser *Invincible*. Indeed, the battle of the Saints with its Drake and Hood shows the splendid continuity of naval family service from the time of Elizabeth to that of George V, in a tradition of which we have every right to feel nationally proud.

CHAPTER VI

BATTLE OF THE GLORIOUS FIRST OF JUNE, 1794.

We come now to one of those great critical periods in the world's history. The last decade of the eighteenth century was, in a sentence, a reactionary epoch against the lethargy and decadence which had characterized most of that century. This decade was a kind of renaissance with new social ideas, a tremendous yearning for freedom as a result of the misrule, a striving after new ideals, an awakening to fresh impulses.

The successful revolt of the American colonies was but an expression of the new hopes that were permeating the civilized world against despotism and false rulers; and in France the ages of misgovernment and profligate waste, of oppression and injustice, culminated in the Reign of Terror. In England, where they do things more peaceably, a revolution was to come about industrially, and the new aspirations expressed themselves, or began to do so, in terms of steam and mechanical improvements. In short, everywhere there was a general wakening up.

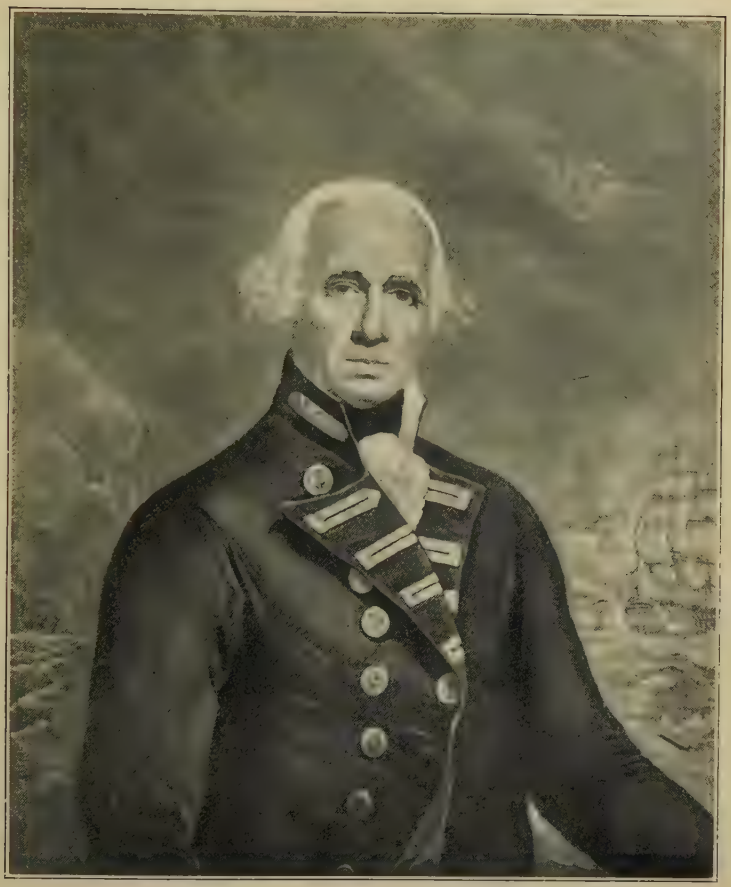
In France, the whole reign of Louis XVI was, in effect, the prelude to a national revolution. In 1792 the monarchy was declared suspended, and the next year Louis was guillotined; but it was not till the month of July, 1794, that, with the

fall of Robespierre, the Reign of Terror ended, and a strong reaction set in. The period which we are now to consider concerns itself principally with June 1, but that date represents merely the climax of the operations.

After a few months of peace, whilst her ancient rival was being torn to pieces by these revolutionists, England was to find herself again at war with France, whose new democratic Government had decreed that every nation was their enemy which rejected liberty and equality, and preferred its old constitution. Louis had been executed in January, 1793, and in that year Kersant, in presenting the report of the Committee of Defence that same month, used words which seem strangely similar to those of modern Communists: 'The credit of England rests upon fictitious wealth; the real riches of that people are scattered everywhere.' And during that year all British merchandise was proscribed throughout France.

The actual declaration of war came on February 1, 1793. Hood became Commander-in-Chief in the Mediterranean, and was succeeded by Hotham. Finally, the French fleet escaped from Gourjean Bay into Toulon and remained inactive during the following winter.

The operations of this present chapter are concerned not with the Mediterranean, but in the northern waters during the following year. Here we see Lord Howe as Commander-in-Chief of the Channel Fleet, and presently we shall also watch him in action, but let us first look into the condition of naval affairs on both sides of the Channel.



LORD HOWE

To face p. 152

We have already noted that in the study of naval tactics the French, with their scientific minds, had for long taken the lead. But now the British Navy was to learn from their enemies. Kempenfelt, in 1780, had written to the Admiralty extolling the French, for, when the latter's 'signals were at any time thrown out to make sail, they were in an instant under a cloud of canvas ; when they returned to their admiral, or were called to him, they run close up to his stern with all sail set, when, in a moment, all disappeared but the topsails. . . . This appears to be not only seamanship, but the brilliancy of it.'

Now, in the British Navy, those fighting instructions which had been issued by Russel in 1691 continued till the battle of the Saints, but shortly afterwards were superseded. And it was Lord Howe who brought about this revolutionary change, so that the basis of the new tactical code was no longer the Fighting Instructions but the Signal Book ; the latter, in fact, becomes of first importance. In 1790 the fighting instructions took a second form in the shape of a new signal code, and upon this tactical system all the great actions of the Nelson period were based, this code continuing in force until 1816.

Thus the new renaissance reached even that conservative institution, the British Navy, at last. And it is significant that up till the year 1782 no important book on naval tactics had been published in English except for translations from the French. It is even still more noteworthy that the first English treatise on the subject was written not by

a naval officer but by a Scotch layman, John Clerk of Eldin, who was a retired business man. His famous 'Essay on Naval Tactics' was printed privately in 1782. This book had a great influence on the imparting of sound principles, and such distinguished admirals as Rodney, Howe, Duncan, St. Vincent, and Nelson owed much to the lessons therein exhibited. In a letter, for instance, dated 1806, Sir T. M. Hardy wrote these words: 'Our departed friend, Lord Nelson, read Mr. Clerk's works with great attention, and frequently expressed his approbation of them in the fullest manner; he also recommended all the captains to read them with attention, and said that many good hints might be taken from them. He most approved of the attack from to-windward, and considered that breaking through the enemy's line absolutely necessary to obtain a great victory.'

Clerk had in effect proposed that in the case of attack from the windward side, the enemy's rear should be cut off (as, indeed, was attempted at Trafalgar). Now the whole development of modern tactics has been simply towards finding the best methods of concentrating the greatest volume of gun-fire. Clerk's theme was to approach the enemy so that the latter's usual concentration could not be brought about.

As to the condition of the French fleet by the spring of 1794 we must understand that the Revolution had ruined it. The discipline had been spoiled, the seamanship and gunnery decayed, the manning of the ships had become a most difficult problem. Violent appeals to the spirits of the men to hate the

opponents of liberty and brotherhood and equality had to take the place of the old-time patriotism. As to the officers—so brilliant, as we have seen, in the handling of their vessels—many had gone into exile or to the scaffold. Officers, petty-officers, and seamen had been condemned to death, and others had been turned into soldiers. No levied landsmen in those days of hemp and canvas could possibly take their place efficiently without long training. And you may guess the nature of the French naval spirit by the decree that the captain and officers of any Republican ship-of-the-line who should haul down the colours to enemy vessels, however numerous, should be pronounced traitors and suffer death, unless the French ship were so shattered (says James) as to be in danger of sinking before the crew could be saved.

Now during the winter months of 1793-4 the British Channel Fleet had lain at anchor, but in a state of readiness to put to sea as soon as the cruisers off the French coast should report that the French fleet had come out of Brest. And so we come to the spring, when it was expected that matters would become lively. We have for our immediate attention that problem of merchant-ship convoys which became of such increasing importance during the years 1917 and 1918 of the Great War ; and at the last decade of the eighteenth century the Mercantile Marine consisted (with the exception of a limited number of coasters and the fishing fleets) of the East Indiamen, the West Indiamen, and those vessels bound for Newfoundland. These craft had to be protected till

well out of the French danger zone, for (as in the Great War) the trade of the country must be continued. On the other hand, France had its problem of the inward-bound convoys; for the position was as follows: The pressure of the Allied armies on the French frontiers, and the bad harvest of 1793, and the difficulty of gathering the crops during those Revolutionary days, had brought France near to the approach of famine.

Where could she look for help? She had previously assisted the rebellious English colonists in North America, and so it was from the United States that large supplies were placed in the holds of many ships and were to be sent across the Atlantic willingly. In order to protect them, warships were sent out from Brest, just as in the Great War they came out to meet the convoys bringing in liners full of American troops bound through the same port for the firing-line.

Howe, therefore, found himself this spring with a threefold duty. First, he had to be responsible for the safety of the East India, West India, and Newfoundland convoys till well clear of the French zone; secondly, he must intercept the Franco-American convoy before it could reach Brest; but, most important of all, he must seek out the enemy's Brest fleet, bring it to action, and defeat it. On May 2, 1794, the British convoy and escort were assembled off St. Helen's, that historic rendezvous, and a magnificent sight it must have been. One's imagination longs for a picture of that marvellous congregation of stately East Indiamen and solid wooden walls. They

numbered 49 ships of war, of which 34 were line-of-battle ships, but there were 99 merchantmen. A total of 148 sail! What a subject for an artist, to watch these hauling up their hempen cables and breaking out their topsails!

By noon every ship had left her anchorage, and two days later Howe parted company with them off the Lizard, and proceeding towards Ushant arrived off there next morning. Rear-Admiral Montague with eight ships, consisting of six '74's' and two frigates, he sent to escort the merchantmen as far as the latitude of Finisterre, another small squadron of about half a dozen warships having been detailed to escort the traders through the rest of the voyage. Howe's main fleet now consisted, therefore, of twenty-six ships-of-the-line, six frigates (later increased to seven), and six small craft. His three biggest vessels were the *Queen Charlotte*, in which he flew his flag, the *Royal George*, and the *Royal Sovereign*, each of which was a 100-gun ship.

Round the island of Ushant Howe sent a couple of frigates towards the entrance of Brest in order to ascertain if the French fleet were still in port, and these presently returned with the intelligence that the enemy were at anchor in the Brest roads. Howe therefore reasoned that he was between the enemy's fleet and that Franco-American convoy now almost hourly expected. He therefore spent from May 5 to May 18 crossing the latitude through which the latter was likely to sail. On May 19 Howe was back again off Ushant, having seen nothing, and again he sent a couple of frigates to peep into Brest. They did so, and found that the

port was empty; actually the French fleet had cleared out on the evening of May 16.

In the meantime Admiral Montague was cruising about between Belle Isle and Cape Ortegal at the southern end of the Bay of Biscay, and sent a frigate to inform Howe that after parting from the East Indiamen he had captured a French corvette and recaptured ten of the Newfoundland convoy, which were being taken into a French port as prizes by the corvette. Information derived from French prisoners proved that a French squadron had also come out of Rochefort to escort the American convoy, and was to cruise in the latitudes 45° to 47° north. Therefore Howe sailed to assist Montague, and on the way made certain captures, obtaining information of the Brest fleet. After proceeding to sweep the Atlantic for some days, when about 350 miles west of Brest the look-out frigates sighted the main French fleet. This was on May 28, at 6.30 a.m., the position given being lat. 47° 34′ N., long. 13° 39′ W.

Now the French fleet consisted of twenty-five ships-of-the-line, of which the *Montagne*, a vessel of 120 guns, was the flagship. There were three 110-gun vessels, four of 80 guns, and the rest were 74's. The Commander-in-Chief was Rear-Admiral Villaret-Joyeuse, who in the time of Louis had been a post-captain. The tonnage of these four classes was 2,600, 2,350, 2,220, and 1,860 respectively. 'On the morning of the 28th,' said Howe, in his official report to the Admiralty, 'the enemy were discovered far to windward, and partial actions were engaged with them that evening and the next

day.' For at ten o'clock on the morning of May 28 the French formed their fleet in line-ahead, but irregularly. They were on the port tack ten miles away, the wind being fresh S.S.W., and the Atlantic was rough. Thirty-five minutes later Howe's fleet wore round and also came on the same tack as the enemy, and passed them to windward in two columns. The French rear was attacked, and at 10 p.m. the *Révolutionnaire*, one of the enemy's big 110-gun ships, having carried away her fore and main yards, as well as her main-topsail yard, got athwart the British *Audacious* (one of the 74's), but sheered off, and drifted to leeward. The *Audacious* herself became crippled, and eventually had to make for Plymouth.

The important fact was that the British had this day gained the weather gage. On the 29th hostilities were resumed, but on the 30th a fog came down, though they could hear each other's bells not far away. During the night of May 31–June 1 Howe's fleet stood to the westward, and at daybreak was in lat. 47° 48′ N., long. 18° 30′ W., standing on the port tack, the wind being moderate from S. by W., the French being six miles to leeward. 'The fleet being in a situation for bringing the enemy to close action the 1st instant,' wrote Howe, 'the ships bore up together for that purpose between seven and eight o'clock in the morning.' . . .

It surprised the British seamen that on counting the enemy's ships the number was still found to be twenty-six. Besides the *Révolutionnaire*, which had been sent away in tow to Rochefort, three other damaged ships had been dismissed under

cover of fog and night; but the French Admiral Nielly had in the meantime joined Villaret-Joyeuse with three ships-of-the-line and one 74. At 7.16 a.m. Howe, still with the weather gage, signalled that he intended to attack the enemy's centre, and a few minutes later that he should pass through the enemy and engage to leeward. The two fleets were now about four miles apart, and before the battle Howe wisely hove-to and sent his men to breakfast. They had been for three days and nights ready and expecting an engagement, and were fatigued. About a quarter-past eight the British fleet let draw their sails, bore down in line-abreast on the enemy, and Howe signalled, says James, 'for each ship to steer for, and independently engage, the ship opposed to her in the enemy's line.'

In this signal we see at first sight a strange return to the old-fashioned Elizabethan tactics, but the circumstances in this case were peculiar. Howe knew that ship for ship the efficiency of the French was inferior to the British, and this supposition was justified in the results. He had rearranged his line so that the French three-deckers and other heavy ships should be met with corresponding weight. His frigates and small craft he stationed in the rear, three frigates being detailed for repeating the signals.

Picture, then, the French fleet on the port tack, steering to the west in close formation, single line-ahead, the French flagship *Montagne* being in the centre, the fourteenth ship. Howe in the *Queen Charlotte* was also in the centre and four-

BATTLE OF THE FIRST OF JUNE: PLAN

In this plan all British ships are marked by numerals, and the French by letters. The time is 9.15 a.m. on June 1.

To face p. 160

teenth ship. A reference to the accompanying plan will make this perfectly clear. It is interesting to note that both fleets were carrying single-reefed topsails, the wind being still fresh from S. by W. Steering N.W. under this reduced sail, the British were coming along at about five knots, and some of the French were lying-to or backing and filling in order to keep in line. James makes the following noteworthy statement that 'after having at 8 h. 38 m. a.m. hauled down the preparative flag from the signal to engage (No. 36), Lord Howe emphatically shut his signal-book, as if he considered that, for the present at least, it would no more be wanted. Not many minutes afterwards, however, he had to reopen it to call upon the *Gibraltar*, *Culloden* (who had backed both fore and main-topsails), and *Brunswick* to make more sail, and soon had the mortification to observe the *Russell* and, above all, his van ship, the *Cæsar*, with their main-topsails aback, although neither was within gunshot of the enemy.'

But at 9.24 a.m. the French van opened a distant fire upon the British van. Six minutes later the *Queen Charlotte*, with the signal for close action flying at her masthead, steered an oblique course for the *Montagne*, and with the intention of being the first through the enemy's line, let fall her foresail and set her t'gallants. About ten o'clock, then, there was another magnificent picture for anyone who loves seamanship; for the *Queen Charlotte* got within two lengths of the *Montagne's* port quarter, then put her helm up, and steered so close to the French flagship that the French ensign actually

brushed the main and mizzen shrouds of Howe's flagship. Simultaneously came the *Queen Charlotte's* concentrated broadside, which raked the *Montagne* with deadly point-blank fire. As in the battle of Lepanto we have a Commander-in-Chief seeking out his opposite number. The battle now resolved itself into a series of duels, and we may quote from a letter written by Midshipman William Parker, who was serving in the *Orion* (a 74) under Captain J. T. Duckworth.

Writing to his father an account of the battle, Parker said: 'At eight the action began, and the firing from the enemy was very smart before we could engage the ship that came to our turn to engage, as every ship is to have one because our line is formed ahead, and theirs is also. Suppose their first or leading ship is a 100-guns and ours a 74, our ship must engage her. I believe we were the ninth or tenth ship; our lot fell to an 80-gun ship, so we would not waste our powder and shot by firing at other ships, though I am sorry to say they fired very smartly at us and unluckily killed two men before we fired a gun, which so exasperated our men that they kept singing out, "For God's sake, brave captain, let us fire! Consider, sir, two poor souls are slaughtered already." But Captain Duckworth would not let them fire till we came abreast of the ship we were to engage, when Captain Duckworth cried out, "Fire, my boys, fire!" upon which our enraged boys gave them such an extraordinary reception that I really believe it struck the rascals with the panic. . . .

'The smoke was so thick that we could not at all

times see the ships engaging ahead and astern. Our maintop-mast and main-yard being carried away by the enemy's shot, the Frenchmen gave three cheers, upon which our ship's company, to show they did not mind it, returned them the three cheers, and after that gave them a furious broadside . . . at about ten the *Queen* broke their line again, and we gave three cheers at our quarters; and now we engaged whichever ship we could best.'

But the finest duel of all was that between the British *Brunswick* and the French *Vengeur*, both being 74's. The reader will doubtless be familiar with those huge anchors which ships of that time carried stowed conspicuously outside the hull just below or abaft the foremast, with flukes sticking out. Well, this duel began with the two ships getting foul of each other, the anchors catching in one another's channels and rigging so that they were locked together. The two heavy ships rolling to the Atlantic swell pounded and crashed, smashed and ground their wooden walls, but still they remained tethered. It was a ridiculous position, for aboard the *Vengeur* the men could not open the lower-deck ports, nor use the long-handled rammers and sponges for their guns, and so this deck's artillery could not be used.

Aboard the *Brunswick* the crew fired their lower guns and blew out the lids of their ports. Employing sponges and rammers fitted to rope, they could still work their guns. Of course, this gave the British a great advantage, though at bow and stern where, owing to the architecture of the ships, the distance was greater, the French were able to

use some of their lower guns. But matters were very different above them; for the *Vengeur's* heavy cannonade and excellent musketry managed to silence the *Brunswick*, and the latter's commanding officer, Captain John Harvey, was mortally wounded, as were many of his men. Another French 74, the *Achille*, in order to aid the *Vengeur*, laid herself alongside the *Brunswick*, but at this time the British 74 *Ramillies*, commanded by Captain Henry Harvey (brother of Captain John Harvey), came along and fired at the *Vengeur*, carrying away the latter's masts, with the exception of the mizzen.

The following bald extract from *Brunswick's* log lacks the intimate enthusiasm of Midshipman Parker's account of the fighting, but may well be quoted: 'In breaking the enemy's line got aboard the *Vengeur* and engaged side by side, our anchors having hooked . . . ¼ past 2, the *Vengeur* hauled her colours down, and displayed a Union Jack over her quarter, and hailed for quarter having struck, her masts going soon after and a-sinking.'

But to return to the *Queen Charlotte* and the *Montagne*. The former now found herself engaged with a ship on each side of her. With splendid seamanship she had luffed smartly up round the *Montagne's* stern and into a berth between the latter and the 80-gun *Jacobin:* so little room was there that the *Queen Charlotte's* jib-boom grazed the port mizzen-shrouds of the *Jacobin*. Howe's flagship now fired her port side guns at the French flagship, and the starboard guns into the *Jacobin*. It all happened so quickly that at ten minutes past ten that morning, the *Montagne's* stern frame and

THE GLORIOUS FIRST OF JUNE, 1794

To face p. 164

starboard quarter had been so terribly damaged, two hundred of her men wounded and a hundred killed, that without firing a shot in return, she set her maintopmast staysail and went ahead, the *Jacobin* and several other enemy vessels also making sail in order to get away.

'In less than an hour after the close action commenced in the centre,' reported Howe, 'the French admiral, engaged by the *Queen Charlotte*, crowded off, and was followed by most of the ships of his van in condition to carry sail after them, leaving with us about ten or twelve of his crippled or totally [disabled], exclusive of one sunk in the engagement. The *Queen Charlotte* had then lost her foretopmast, and the maintopmast fell over the side very soon after. The greater number of the other ships of the British fleet were at this time so much disabled, or widely separated, and, under such circumstances, with respect to those ships of the enemy in a state for action, and with which the firing was still continued, that two or three even of their dismantled ships, attempting to get away under a sprit-sail singly, or smaller sail raised on the stump of the foremast, could not be detained. Seven remained in our possession, one of which, however, sank before the adequate assistance could be given to her crew, but many were saved.'

Thus, in short, the battle had begun about nine on the morning of June 1, a few British ships broke through the French line and engaged the enemy to leeward, but the remainder hauled up to windward and engaged. But about ten o'clock the French

admiral, followed eventually by such ships as had received little damage to rigging and sails, made off. By 11.30 that forenoon the crisis of the battle was past; none of the Frenchmen had yet struck colours, but twelve of them were crippled and eleven British were dismasted. The general firing ended shortly after one o'clock, and about five hours later the *Vengeur*, already mentioned, sank.

Howe, with part of his fleet and the prizes, sailed to Spithead, Rear-Admiral Montagu making for Plymouth Sound, and anchored in Cawsand Bay on May 12. This day is important, for on this very date that Franco-American convoy, so long awaited, consisting of 116 ships under escort, arrived off the entrance to Brest in Bertheaume Bay. It was the one thing—and admittedly a most important one—that could soften the loss of so many French men-of-war.

Thus the Revolutionaries received their food, even if they had lost this celebrated battle; but in the next month Robespierre himself fell, the Reign of Terror came to an end, and the Napoleonic shadow was soon to show that in France a new influence was about to come into view, and a new kind of threat which it would require the strength of the British Navy to oppose. But already an officer named Horatio Nelson had reached the rank of captain, and both the desire and the right spirit were already aflame; for, less than a year after Howe's battle of the Glorious First of June, Captain Nelson was writing to his wife: 'I wish to be an admiral, and in the command of the English fleet; I should very soon either do much, or be ruined.'

CHAPTER VII

BATTLE OF ST. VINCENT, 1797.

Since the battle of the Glorious First of June much had happened. We had captured Martinique, lost Santa Lucia, but gained the Cape of Good Hope from the Dutch. In 1796 Hotham had been succeeded by Sir John Jervis, a keen disciplinarian and a great, if severe, admiral, under whom Nelson was to serve with such distinction and such approbation. The French and Spaniards were allied, Corsica and Elba were no longer ours, and Jervis was compelled to withdraw altogether from the Mediterranean. Such was the position of affairs by the end of the year 1796. In the following year France was contemplating an invasion of Ireland; the fleets of France, Spain, and Holland were to join hands off Brest and drive the British fleet from the Channel. Altogether the situation was full of anxiety.

We come now to the middle of January, 1797, and find Jervis at Lisbon with eleven line-of-battle ships, getting ready for sea. His intention is to keep the combined fleets within the Mediterranean and to protect Portugal, but he was expecting five more sail-of-the-line from England to join his flag. The British fleet had withdrawn from the Mediterranean in the previous November, but Nelson had, with a squadron of frigates only, sailed to

Elba in order to bring away the dockyard establishment, and was expected now to pass through the Gibraltar Straits almost any day.

Now, although the Brest fleet had returned to port from their abortive expedition up Bantry Bay —and Jervis was aware of this intelligence—and there were about a dozen line-of-battle ships in Toulon, the British Commander-in-Chief had to be mindful of the twenty-seven Spanish sail-of-the-line now at Cartagena, and about another dozen fitting out at Cadiz. The difference in numbers was therefore very much in favour of the enemy. On January 18 Jervis escorted clear of the land into the Atlantic a Portuguese convoy bound for Brazil, but the dominating anxiety in his mind was Commodore Nelson, of whose approach he was expecting hourly to receive information.

Jervis was hoping for the reinforcement that was coming out from England under Rear-Admiral Parker, which might, or might not, arrive in time. Meanwhile, as Jervis wrote to this junior flag-officer, Nelson's advent made it 'absolutely necessary for me to take a position that will enable me to go speedily to his assistance in case the fleet of Spain should interrupt his passage through the Gut. I have therefore determined to proceed off Cape St. Vincent, and to cruise from five to fifteen leagues south of it until joined by the reinforcement under your command.' It is important to get this quite clear, otherwise that which follows loses its underlying interest. Jervis and Nelson were separated, with the enemy's fleet in between: a situation that could not fail to cause anxiety to

JOHN JERVIS, EARL OF ST. VINCENT

To face p. 168

both officers. Nelson himself, in the words of Southey, 'had long been irritated and depressed by the fear that a general action would take place before he could join Jervis.'

On paper and in theory the obvious thing for an enemy so superior numerically would have been to fall upon Nelson's frigates first and then overwhelm Jervis. But in morale and seamanship and fighting ability Jervis was confident that his own fleet was altogether superior to that of the enemy. The importance of tactical order in a fleet we have already noted on a previous page; and British naval officers had observed the disorder and confusion of the Spanish fleet when at sea. Spain lacked the naval efficiency in her senior officers that she possessed at the battle of Lepanto, and, indeed, ashore their general incapacity was so well known to Spaniards that, as Southey remarks, 'In a pasquinade, which about this time appeared in Madrid, wherein the different orders of the State were advertised for sale, the greater part of the sea-officers, with all their equipment, were offered as a gift: and it was added that any person who would please to take them should receive a handsome gratuity.' On the other hand, under the firm and harsh training of Jervis the British fleet was efficient and a powerful fighting force.

Jervis, by reason of strong easterly winds, was unable to reach his rendezvous with Rear-Admiral Parker until February 6, where he found also a frigate from Gibraltar and a cutter from Nelson. In those days, when wireless had still to be invented, communication between distant fleets or squadrons

had to be maintained by such light craft able to sail swiftly. Nelson's intelligence was dated about January 20: the news from Gibraltar was to the effect that the Spanish fleet was preparing to proceed from Cartagena. We see Jervis sending in a cutter to the Vice-Consul at Faro stating: 'I am without the smallest intelligence respecting the Spanish fleet . . . I will thank you for all the information you are in possession of.'

Actually, though the British Commander-in-Chief was not yet aware of it, the Spanish fleet had sailed from Cartagena on February 4, and the next day had passed through the Straits. It is a fact, also, that the Spanish admiral, Don Jose de Cordova, was not intending to attack Nelson's convoy, but was bound from Cartagena to Cadiz. The latter was five days astern of the Spanish fleet. And thus the second point to be emphasized in this present chapter is that the battle which was to take place occurred not because it was inevitable, but owing to the Levanter wind which sent the Spanish fleet to leeward of their port, and caused it subsequently to pick up the land in the neighbourhood of Cape St. Vincent which Jervis had chosen as his own rendezvous. Here, then, is one of those instances where the advent of mechanical power would, in fact, have prevented the battle which followed: for a fleet of Spanish steamships would have got into Cadiz without being sighted by Jervis unless the latter's cruisers were already watching the Gibraltar Straits.

It was only on February 8 that Jervis learned, through a ship which had been boarded, that the

Spanish fleet had passed through the Straits, and this was confirmed in the forenoon of the 9th by the British cutter *Viper*, which had left Gibraltar on the 5th. Jervis, sheltering under Cape St. Vincent, received news on the morning of the 10th that the Spanish fleet, driven to leeward of Cadiz, was cruising off Cape de Santa Maria—that is, about sixty miles to the eastward of Cape St. Vincent; and, owing to the Levanter, would probably not be able to beat up against the wind to Cadiz.

Now on the morning of the 11th Jervis's fleet was joined by the *Southampton* with the convoy from Elba, who reported she had sighted the Spanish fleet on the morning of the 10th between Cape de Santa Maria and Cape St. Vincent in a disordered condition, three of the Spanish ships being without their foretopsail yards. 'We have a very strong Levanter,' wrote Jervis to the Admiralty, 'but by keeping under the lee of Cape St. Vincent I hope we shall not suffer in our masts and yards, and in case of the Spanish fleet being disabled I flatter myself we shall be able to deal with them.'

Acting on this intelligence, Jervis prepared for battle. But in the meantime what had happened to Nelson? He had looked into Cartagena, but of course found the Spanish fleet already gone. He had been into Gibraltar, sailed at night through the midst of the enemy's force and hurried on under all sail to warn Jervis, and at 9 a.m. on the 13th in the *Minerve* had joined his Commander-in-Chief. Thus in those historic waters off Cape St. Vincent, where over two centuries previously that other

great admiral, Drake, had been wont to wait for the enemy, we have Jervis and Nelson at last concentrated for one of the most memorable fights in naval history.

For now a battle was inevitable. The Levanter ended, the wind on the 13th was variable, but became S.S.W. in the afternoon, and then during the night of the 13th-14th backed to S.E. by S., and veered to S. by W. A westerly wind would surely lead to a meeting of the two fleets. At 3 p.m. on the 13th de Cordova's fleet was about twenty miles to the S.E., and that night, ready for battle, Jervis's fleet was sailing to the S.E. At 1.30 a.m. on the 14th the Spanish signal to wear to the eastward was made by signal guns, and these were heard to the S.S.W. by the British.

But, before the two fleets meet, let us consider their strength. The British force consisted of two ships of 100 guns, two of 98, two of 90, eight of 74, and one of 64. This made a total of fifteen ships-of-the-line. There were also four frigates, a sloop, and a cutter. It should be mentioned that Jervis had ordered Commodore Nelson to shift his broad pennant to the *Captain*, one of the 74's. The Spanish fleet comprised one four-decker, named the *Santissima Trinidad*, of 136 guns, six three-deckers of 112, two of 84, eighteen of 74, or a total of twenty-seven ships-of-the-line, besides ten frigates and a brig. In actual total number of guns the enemy had 1,054 more guns than the British. The disparity was therefore very considerable.

De Cordova's fleet had entered the Atlantic from the Mediterranean with a hard easterly wind, which

drove the ships to the meridian of Cape St. Vincent. It was not until the morning of the 14th that the wind came westerly, and the Spanish fleet was ordered to steer E.S.E. and to form in three columns. That morning was hazy, but the British were the first of the two fleets to sight the other, this being at 6.30 a.m., to the S.E. and S.W. At 9 a.m. the Spanish fleet was seen to be scattered, with its advanced ships so far to leeward as not to be able to weather the British van. About this time some units on de Cordova's left signalled suspicious sail in sight, and at ten o'clock the full British fleet was discerned, and the Spanish Commander-in-Chief gave orders to 'form in a prompt line without regard to stations, and clear for action, hauling their wind on the larboard tack.'

The fact is that de Cordova had not taken adequate precautions. Nine days previously he had learned from an American that the British fleet consisted only of nine ships, but he was not aware of the reinforcement which had been made, and the scattered condition of the Spanish force prevented full advantage being taken of de Cordova's superior strength. The British fleet was in two columns in close order on the starboard tack heading to the S.S.E. So soon as the haze had cleared, and Jervis had perceived the Spanish formation, the British Commander-in-Chief determined to pass between the two divisions in single line-ahead, separate them, and then concentrate on the larger division.

Under a press of sail Jervis passed through the enemy fleet, tacked, and cut off nine Spanish ships

from the main body, and then, having done this, directed his attack towards the main body. He made the signal to his line-of-battle to tack in succession—that is to say, each ship was to reach the spot where the *Culloden* had tacked, and then to go about. Now Nelson's ship was in the rear of the British line, and here that splendid officer, who was some day to become Britain's greatest naval hero, took in the situation with his eager eye, and realized that his Commander-in-Chief had made a tactical error.

It needs real moral courage in the hour of battle deliberately to disobey the orders of a superior officer, and especially the orders of one such as Jervis. But Nelson realized that the Spaniards were now bearing up before the wind with the intention of forming their line, and he had the genius, the insight, the moral bravery to wear his ship out of line, and the physical courage to interpose the *Captain* in the way of the oncoming Spaniards. The result was that the 74-gun *Captain* was being attacked by the *Santissima Trinidad* of 130 guns, the *San Joseph* of 112 guns, the *Salvador del Mundo* of 112 guns, and four other ships as well. But the gallant Commodore Nelson fought on in his dogged, glorious manner until Troubridge in the *Culloden* and Collingwood in the *Excellent* were able to come to his assistance.

In his ready appreciation, his right judgment, and quick action Nelson showed himself the great tactician that he really was, and the model of what a naval officer should be in resource and daring. And whilst the rest of the ships were attacking and

BATTLE OF ST. VINCENT

To face p. 174

the sea was covered with a pall of smoke, a Spanish vessel luffed up and came alongside the crippled *Captain*, which had her foretop-mast gone, her wheel shot away, and even sails and shrouds. But Nelson with his men boarded the enemy only to find that the ungallant Spanish officers had locked themselves in their cabins, and were firing pistols out of the windows. However, the doors were forced, the poop was captured, and at the break of the forecastle Nelson received the swords of several Spanish officers; before long the whole ship had surrendered, and about 5 p.m. the action ceased: soon after the flagship *Santissima Trinidad* struck her colours. But at the very end the latter was saved from capture by her supporting ships. This *Santissima Trinidad* was the rear ship of the Spanish fleet, and was engaged by several British ships.

Cordova states that only seventeen of his Spanish fleet had been able to form in battle order, and that many did not come up to fire a shot, 'with the result that all the enemy's force were employed solely against six Spanish ships.' But the essential point of this fight is that the British fleet had been immediately formed in line-of-battle, and seized the big opportunity that presented itself. Jervis's own words are as follows: 'By carrying a press of sail I was fortunate in getting in with the Enemy's Fleet at half-past eleven o'clock, before it had time to connect and form a regular Order of Battle. Such a moment was not to be lost. . . . I felt myself justified in departing from the regular system; and, passing through their Fleet, in a line

formed with the utmost celerity, tacked and thereby separated one-third from the main body, after a partial cannonade, which prevented their re-junction till the evening.'

And writing to Lord Howick nine years afterwards in reference to some reward that was suggested in respect of Clerk of Eldin (the author of 'An Essay on Naval Tactics,' already mentioned in a previous chapter) we have the following interesting statement by Jervis, which shows how the latter felt in regard to the tactics this day displayed: 'Not having Mr. Clerk's treatise on naval tactics with me, I am unable to give you a detailed opinion upon the influence it has had in the several victories our fleets have obtained over those of France, Spain, and Holland since its publication. . . . Inclosed your Lordship will receive the best judgment I can form on the claim Mr. Clerk has of any merit in the battles of the First of June, and the attempts on the preceding days by Lord Howe; the battles of Camperdown and Trafalgar; that fought off Cape St. Vincent *is totally out of the question.*'

'At the battle of Cape St. Vincent the British admiral attacked the enemy's centre,' wrote the late Admiral Mahan in his 'Naval Strategy,' 'but that was because the enemy had left the centre so weak—in fact stripped—that it was possible for the British fleet to interpose between the two flanks, and engage one only of them, as Napoleon broke the enemy's centre at Austerlitz.' But Jervis (who became an Earl and took his title from this battle) had done something more than being original: he

BATTLE OF ST. VINCENT: PLAN

The upper half of the plan shows the position at 12.45. The two divisions of the Spanish fleet are marked A and B. The lower half shows the two divisions crowding off in confusion after having been beaten.

To face p. 176

had done everything humanly possible—in the endeavour to manœuvre his fleet so as to bring the enemy to action and to prepare it with full readiness for battle, in his accurate judgment in using the enemy's confusion to the best advantage, and in the decision to withdraw from the battle with the enemy beaten, but not annihilated, and capable of yet employing its superior numerical power. Four Spanish prizes were taken, but there were serious injuries to several British ships.

If Nelson during this battle showed the moral courage at its crisis to disobey Jervis, the latter exhibited just that quality in withdrawing from a battle in which the enemy was not defeated. In a few words, then, those characteristics which stand out from this fight may be summed up as follows: discipline, training, morale, careful reconnaissance, insight, boldness, surprise, prudence, restraint. And it is a combination of these that make for victory: we have here a wide sphere for contemplation by any who would aspire to become great admirals.

As to the more personal aspect in which Nelson was concerned, let this be remembered. When the action was ended and Nelson went aboard the flagship of Jervis, the latter received his gallant Commodore on the quarter-deck, took him in his arms and declared that he could not thank Nelson adequately. 'My dear good friend,' wrote Captain Collingwood of the *Excellent* to Nelson on the day after the battle, 'First let me congratulate you on the success of yesterday,—on the brilliancy it attached to the British Navy, and the humility it

must cause to its enemies,—and then let me congratulate my dear Commodore on the distinguished part which he ever takes when the honour and interests of his country are at stake. It added very much to the satisfaction which I felt in thumping the Spaniards that I released you a little. The highest rewards are due to you and *Culloden:* you formed the plan of attack,—we were only accessories to the Don's ruin; for, had they got on the other tack, they would have been sooner joined, and the business would have been less complete.' And to this Nelson replied the same day from aboard the *Irresistible:* 'My dearest friend, "A friend in need is a friend indeed" was never more truly verified than by your most noble and gallant conduct yesterday in sparing the *Captain* from further loss; and I beg, both as a public officer and a friend, you will accept my most sincere thanks.'

Collingwood, Nelson, Jervis: what does not Britain owe to such a trio! A captain, a commodore, an admiral; and each of them a very gallant gentleman who added lustre to his own particular rank.

CHAPTER VIII

BATTLE OF THE NILE, 1798.

NOTWITHSTANDING the victory of St. Vincent, the year 1797 is a black year in the history of the Royal Navy, for it was the time when confidence in the British service was to receive a rude shock owing to the mutinies at Spithead and the Nore. As we know from a letter sent by Lieutenant Philip Beaver, written aboard the *Monarch* at Portsmouth two days after the Spithead episode, the men were not dissatisfied with their officers or service, 'but are determined to have an increase of pay, because it has not been increased since the time of Charles the First, and that everything since that period has risen 50 per cent., that no attention had been paid to their petitions, and that, on the resignation of Lord Howe, they were forced to pursue the present measures.' Administration on the part of the Admiralty in those days was anything but perfect, the statements were found to be well founded, and the men were pardoned.

This mutiny had taken place on April 15, but another occurrence of a similar nature occurred on May 7, and again the men were pardoned. But six days later a mutiny broke out at the Nore, and in the same month among Admiral Duncan's fleet off the Texel, in Jervis's fleet off Cadiz, in the squadron at the Cape, and the West Indies. Now

it is to be noted that these mutinies never occurred in any of Nelson's ships, and when he was appointed to the *Theseus*, whose crew had been mutineers, Nelson soon found a chit of paper on the quarter-deck, signed in the name of the ship's company, in which they expressed themselves as happy and comfortable, and ready to shed every drop of blood to support Nelson. It is well to bear this attitude and feeling in mind, for ships, officers, and men were to be tried presently by keen disappointment and hard fighting in one of those campaigns which have decided European history.

The position of affairs was as follows. We had evacuated the Mediterranean, for even after the battle of St. Vincent no British squadron had passed in through the Gibraltar Straits: to have blockaded Toulon and hindered the French operations in Italy would have been a great and difficult task. Supplies were not available locally, convoys along a line of communications that had to be protected would have been necessary, and we could not afford the ships in 1797. We had quite enough to do dominating the Dutch fleet off the Texel, the Spanish fleet in Cadiz, the French fleet in Brest, being prepared also to send ships to prevent an invasion of Ireland, to say nothing of the anxieties caused by the French privateers. And these mutinies had not lessened the anxieties of those at the head of affairs.

But if France was immensely strong on land, nobody realized so well as Napoleon that the French and Spanish fleets were inferior now to the British in fighting efficiency. Everyone to-day

knows full well how during the Great War the Grand Fleet exercised such a blockading pressure on the German High Seas Fleet that the morale in the latter gradually deteriorated. Exactly the same thing had happened at the close of the eighteenth century: the French fleet had been kept by the British blockade in Brest so long that its spirit was very much inferior to that of our men.

To many of us the most interesting aspect of warfare is not the spectacular sight of fire and smoke, not the noise of guns, nor the pathetic picture of sinking ships and dying men. That which makes any naval campaign as interesting as any other drama is the mentality behind it all: the motives, the subtleties, the planning and counter-planning, the exercise of human wills in mutual opposition, the big risks and gambles with fortune, the sudden twists to negative the most carefully laid schemes. In short, it is the personnel rather than the matériel, the higher command rather than the executive, that we wish to study before watching the sudden clash of arms, the clever tactics, and the cases of individual gallantry.

Therefore, in approaching the battle of the Nile, let us first see what was in Napoleon's mind in his enmity against our country. He was not a seaman, but a soldier who relied chiefly on his army. How to strike a blow at England? Invasion by a large army to be embarked at various places between Havre and the Texel and sent across under cover of darkness or thick weather. It is here that we get that same problem as when the Spanish Armada came up the Channel. Napoleon's scheme was all

right if it succeeded, and all wrong if it failed. In other words it was a pure gamble, most unlikely to be successful for the simple reason that the French did not possess command of the sea, and therefore the transit of troops would be extremely risky. The Armada never established command of the sea and never landed a soldier. Napoleon was too wise and experienced a strategist to bring his invasion ideas to practical test: even his love of risks lacked the courageous folly requisite for such an enterprise. But, be it remembered, this invasion bogey had a serious effect on Great Britain. Of all war threats to any country the invasion scare is one of the very worst, and the longer it is continued, the more the suspense is maintained, the greater the national harm is done. Thus our country was kept in a state of continuous alarm, a large reserve of ships had to be retained in home waters, and the Mediterranean remained as a French lake.

By the beginning of the year 1798 Napoleon's mind had rejected the English invasion project and was considering a much bigger plan which would have no less an effect. History is one mass of repetitions, one long reiteration of different persons in different ages having the same motives and encountering the same experiences. In the galley age we have witnessed men of unlimited ambition and vast imagination seeking to become rulers of the world, almost succeeding, and then, frustrated by a decisive sea-battle at the big crisis, compelled to find their bold plans torn to shreds with amazing suddenness: all the hopes and hard thinking, all the careful preparations of months and

years, all the organization of men and supplies and transports made utterly unavailing in one short span of a few hours.

So it was to be with the latest megalomaniac. Napoleon's aim now was the vast intention of conquering Egypt, and thence his road was clear to India, which was to form part of a huge Napoleonic Eastern Empire in which Turkey, too, would be a section. India? The richest treasure house of the world; the country which had cost so much effort to the Portuguese in their zeal to find a sea-way thither; the territory which had since sent to England a continuous yield of wealth through the Honourable East India Company, which was the backbone of the British Mercantile Marine. India? To strike there was to strike at British wealth, trade, shipping, and prestige. Still, that was Bonaparte's plan, but it was kept beautifully secret, and that is the essence of sound warfare.

In the spring of 1798, then, he was busy arranging details for this seizure of Egypt with all despatch. In order to screen from our eyes his intention, the Spanish fleet was to be sufficiently active in order to keep St. Vincent (Jervis) located in the neighbourhood of Cadiz, and the invasion of England bogey was allowed its fullest freedom in promulgation. Thus Napoleon himself remained in Paris until five days before the Egyptian expedition was to start: this was to consist of 35,000 troops. So far, then, it was a perfectly sound plan, for the French still had command of the Mediterranean, and these troops could rely on being taken across in safety.

But all this French naval activity at Toulon was causing the British Government anxiety. What was about to happen? Was the Toulon fleet about to come forth in order to invade Ireland? It was essential to ascertain what was in the wind, and so St. Vincent detached a small squadron under Nelson to find out. Early in 1798 Nelson had hoisted his flag in the *Vanguard* and been ordered to join St. Vincent. On April 30 he had arrived off Cape St. Vincent, and then with three ships was ordered to proceed at once to the Mediterranean. On May 17 Nelson arrived off Toulon and captured a French corvette, from which he obtained partial intelligence, but was unable to learn the destination of the expedition.

It was on May 3 that Napoleon left Paris, and the expedition which was to have sailed five days later was delayed until May 19 owing to weather, but now began to move. On June 9 this expedition was off Malta, which surrendered, and on the 19th set sail eastward and made to get a landfall off Crete before altering course for Egypt. Now in the meantime Nelson had suffered the bad luck of this expedition having slipped through his fingers. On June 7 Troubridge, with eleven ships, joined Nelson, and a week later at Civita Vecchia Nelson learned that the enemy had been seen off the south-west of Sicily, steering east. On the 17th Nelson learned that the enemy had landed at Malta, but on the 22nd, when off Cape Passaro, he learned that the French had left Malta.

Where had they gone? That was the problem. Now Nelson, it should be explained, had been

already able to obtain valuable information. He had found forty-four ships of war ready in Toulon, as well as two hundred transports being got ready for this expedition, and had sent a sloop to warn St. Vincent, and himself had waited in the Gulf of Lyons, where his squadron had been caught in a heavy gale, so that the *Vanguard* herself was dismasted and nearly wrecked on Sardinia. However, she had refitted and returned towards Toulon only to find that the expedition had started. This delay, however, had enabled him to take water aboard and to get his reinforcements. Napoleon's ships also went through that same gale. But now that Nelson had found that Napoleon had gone east from Malta, he reasoned that the French were bound for Egypt. Nelson was right, and he sailed to Alexandria under all canvas: he had put himself, so to speak, into Napoleon's mind and tried to discover the enemy's plan. But in order to appreciate the fog of uncertainty we must not forget that St. Vincent's instructions to Nelson suggested that there were three possible objects of that Toulon expedition. The invasion of Ireland we have mentioned. The second was an invasion of Portugal through Spain; the third was an attack on the Kingdom of the Two Sicilies. There was no mention of Egypt. At Naples Nelson had satisfied himself that the French were not contemplating an attack on the Kingdom.

History is so full of narrow escapes and 'might-have-beens': so many incidents have just failed to prevent certain big occurrences. In this campaign, for instance, the same thing happened. On

June 25 both east-bound fleets were within about sixty miles of each other, and had Nelson possessed frigates, or, as we should say nowadays, light cruisers, that expedition would have been brought to action, and those troops would have found that the command of the Mediterranean had been suddenly disputed. In these days of wireless telegraphy and air-scouts, to say nothing of passing merchant ships, it would have been impossible for Napoleon and Nelson to have been so near without an engagement ensuing. Having regard to the immense fighting superiority of the British fleet (proved as it was a few weeks later when the battle did take place), we may well consider how momentous this Mediterranean fight would have been—the sinking of transports, the loss of the French army, and the death or capture of Napoleon. The battle of Waterloo would never have been fought: the whole story of international politics would have been different.

But it was not till June 27, when off Crete, that Napoleon did learn from a frigate that Nelson had called at Naples on the 17th. Bonaparte then turned south, made a landfall well to the west of Alexandria, and on July 1 the expedition arrived off Alexandria and the troops began to disembark. But by the irony of fate, Nelson, whose instinct and reasoning had induced him to Egypt, had arrived off Alexandria on June 28, and to his surprise, as well as intense disappointment, the French were not there.

Thus, by a matter of only two days, Napoleon and his helpless troops aboard those transports

A BRITISH FRIGATE UNDER WAY

To face p. 186

again escaped destruction. As for Nelson, he was completely baffled, and now believed that he had failed to apprehend Napoleon's objective. He therefore began to make, on June 29, a sweep of the eastern Mediterranean, coasting along Syria, then northward to Caramania, and finally west to Sicily. 'I cannot to this moment learn, beyond vague conjecture, where the French fleet are gone to,' he remarked. His irritation was that of an efficient, active, eager sailor who loathes failure. There was nothing for it but to try again, and off the Gulf of Coron Troubridge came up and informed him that the French had been sighted four weeks previously, steering for Candia. Nelson resolved accordingly to sail again to Alexandria. It was on July 19 that Nelson had reached Syracuse, and on the 24th we see him off again towards the Egyptian coast.

As to the French operations during July, these may be summed up as follows: With good luck the expedition had narrowly escaped action by a matter of hours. The army had then disembarked at Alexandria, marched south, the Mamelukes had been defeated at the battle of the Pyramids on July 21, four days later Napoleon entered Cairo, and then proceeded to complete the conquest of Lower Egypt. But what about the French fleet? The French admiral, Brueys, was given the alternatives of going inside the harbour, or Aboukir Bay, or across to Corfu. The amazing fact stands out that neither Napoleon, with all his military genius, nor Brueys, with his naval experience, seems to have realized that, the army having been

landed, it was the duty of the French fleet to obtain command of the Mediterranean, or at least to impede the British operations. It was obvious that presently the British fleet would institute a blockade of Alexandria, since it was the means of communications and gateway of supplies for the French army that had entered Egypt. And, if we may anticipate, the French, after the battle of the Nile, did at once take steps to organize a squadron at Corfu composed of surviving ships, plus some Venetian vessels, with the intention of reopening communications and protecting army supplies. But it was too late, and British superiority on sea prevented this hope from being realized.

Brueys elected to take his fleet into Aboukir Bay, where he anchored them to the south-east of Aboukir Island in single line-ahead, the prevailing wind here being north-west. The French van had brought up as near as it dared to shoal water on the west, forming a slight curve parallel with the deep-water sounding line. But, actually, neither the van nor the rear was sufficiently close to the shoals to prevent the French flanks being turned. With the wind at north-west, the most likely attack was on the ships in the van, for, not merely would the attacker come down with a fair wind, but the rear of the French fleet would have to beat to windward in order to succour the van, and this would mean delay. Brueys had endeavoured to make the most use of the local navigational difficulties for his fleet's protection, but, in fact, his vessels were not quite near enough to the shoals to make this security more than theoretical.

BATTLE OF THE NILE: PLAN

In this plan the British fleet are seen at bottom of the picture in line ahead sailing towards the S.-W. The French fleet are riding at anchor. The ship ashore N.-E. of Nelson's Island is "Culloden," with "Mutine" close to her. On the left in the foreground are two frigates and two other ships escaping, with the "Zealous" pursuing.

To face p. 188

During the whole of this chase up and down the Mediterranean, Nelson had, whenever practicable, summoned his captains aboard the *Vanguard* in order to explain to them his intentions; and on the eve of this battle of the Nile—more accurately the battle of Aboukir Bay—he had given his senior officers a general idea of his plan. Let us not forget that in those days good charts of such waters did not exist; the British fleet had to sound its way through the shoals towards the enemy. But Nelson took in the situation, and reasoned that where the French had allowed themselves room to swing there was water enough for the British ships to float and anchor.

It was at 1 p.m. on this first of August that Nelson had sighted the French anchored fleet, but it was not till about five hours later that the battle actually began. The French strength was thirteen ships-of-the-line; the British force was the same, in addition to one 50-gun ship. The other British units were 74's, whilst the French had three 80-gun ships and a three-decker of 120 guns. The total armament of the enemy was 1,196 guns against the British 1,012 guns. It should be mentioned that the Rear-Admiral Nelson had one brig, whilst Vice-Admiral Brueys had four frigates, as well as a couple of brigs. The French transports and merchantmen were in Alexandria.

The French ships were lying, each to a single anchor, without springs on their cables, and part of the crews were ashore getting water. One need say nothing in comment except that the enemy's state of preparedness was hardly efficient. At

3 p.m. Brueys made the signal to prepare for battle, and an endeavour was made to entice by two brigs the British advanced ships on the shoals off Aboukir Island.

The French admiral believed that Sir Horatio Nelson would postpone the attack until the next day, but soon realized his mistake. It was at 4 p.m. that Nelson made the signal ordering his fleet to prepare to anchor by the stern, and presently that he intended to attack the enemy's van and centre. This was to be done so that part of his fleet after crossing the enemy's van would be on the south or landward side of the French line, and part on the northern or seaward side, as far down as Brueys' *Orient*, which was the flagship and the seventh vessel. The tactics, then, were those of attack by concentration against the windward half of the French fleet. As Nelson himself expressed it some months afterwards in a letter to Lord Howe: 'By attacking the enemy's van and centre, the wind blowing directly along their line, I was enabled to throw what force I pleased on a few ships . . . and we always kept a superior force to the enemy.'

Each of seven French ships, then, was to have a British ship on her bow and quarter: this was the basic idea. At 5.30 p.m. Nelson formed his fleet in line-ahead. Hailing Captain Hood of the *Zealous*, he inquired if there was enough water for our ships to pass between the enemy and the shore. 'I don't know, sir,' replied Hood, 'but with your permission I will stand in and try.' For it should be remembered that not an officer or man of the British fleet had ever been in Aboukir Bay

A BRITISH "74" OFF PORTSMOUTH

To face p. 190

before, and no ship had a chart with the exception of the *Swiftsure*, which possessed a rough sketch recently obtained from out of a prize.

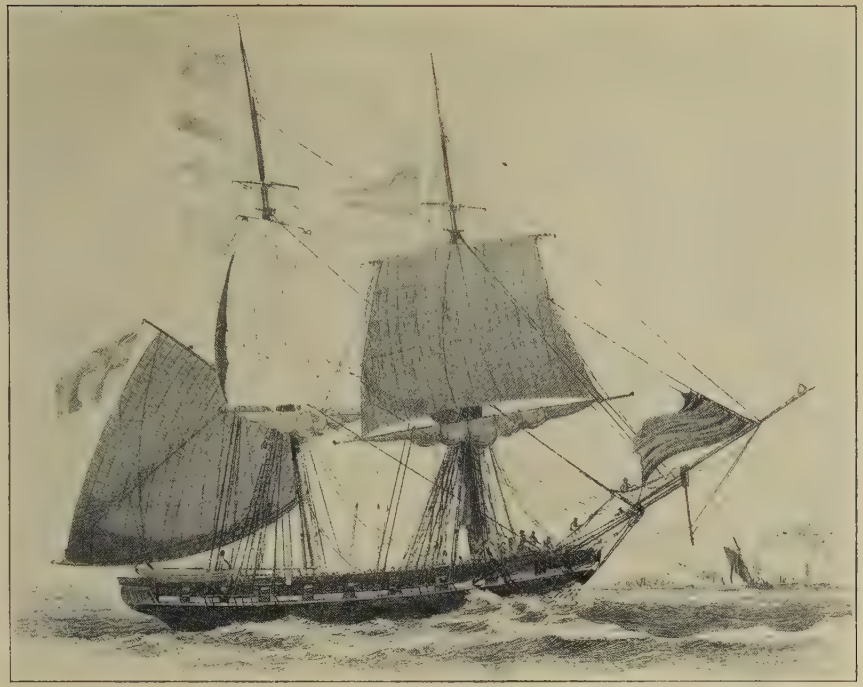
But these were the days when seamanship was a real art, when pilotage relied on the skilful leadsman. The very word 'loodsman' in Holland had always signified 'pilot.' So away went the *Zealous*, and by careful sounding she felt her progress round the shoal. It was at half-past five that the *Goliath* crossed the enemy's van and poured raking fire into the *Guerrier*, which was the head of the French line. *Goliath* then anchored by the stern on the port quarter of the *Conquerant*, which was the second in the French line. The *Zealous* brought up on the port bow of the *Guerrier*. The British *Orion* also passed across the *Guerrier's* bows and anchored *head* to wind abaft the beam of the *Peuple Souverain*, which was the enemy's fifth ship, having incidentally sunk the French frigate *Sérieuse*. Two more British ships also came on to this shore side, of which the *Audacious* brought up on the *Conquerant's* port bow, whilst the *Theseus* anchored by the stern abreast of the *Spartiate*, which was the enemy's third ship. There were thus five British ships on the inner side of the enemy's first five vessels.

Now on the outer side of this French line Nelson in the *Vanguard* anchored on the third ship's (*Spartiate's*) starboard beam, then the *Minotaur* brought up ahead of *Vanguard* abreast of the *Aquilon*, which was the French fourth ship, and the *Defence* similarly anchored abreast of the fifth Frenchman—the *Peuple Souverain*. Two more

British ships came also—the *Bellerophon*, which anchored abreast of Brueys' *Orient*, and the *Majestic*, which was on the starboard bow of the eighth enemy vessel, the *Tonnant*. It will be seen, therefore, that actually there were five British ships on either side of the enemy's line to engage eight French ships. The concentration had been made in the ratio of ten to eight.

What had become of Nelson's four other units? The answer is that Troubridge's *Culloden* had the misfortune to get aground, and was never able to take part in the action. The *Swiftsure*, *Alexander*, and the *Leander*—the latter a 74—which had been sent the previous day to reconnoitre and do the work of frigates, did not join until after the battle had started. The *Swiftsure* after eight o'clock brought up abreast of the *Franklin*, the enemy's sixth ship. The *Leander* on arrival also attacked the *Franklin*, and the *Alexander* anchored so as to engage with her starboard side the *Orient's* port quarter.

According to Nelson the battle began at 6.28 p.m. 'At twenty-eight minutes past six,' he wrote to Howe, 'the sun in the horizon, the firing commenced.' Half an hour later the darkness covered the Mediterranean and the fight was being waged fiercely. In order to provide identification lights, every British ship hoisted at her mizzen peak four lanterns horizontally about seven o'clock. Events followed quickly, for within the first quarter of an hour the first two ships of the French line had been dismasted, and at 8.30 p.m. the third, fourth, and fifth were taken as prizes. For seventy minutes—



A BRIG OF WAR OFF DOVER

To face p. 192

the time is given by Nelson—the *Orient* was on fire, and at 10.5 p.m. she blew up with such a shock that it was felt in every vessel afloat. The picture of the French flagship throwing great sparks against the velvety Egyptian sky, lighting up the sea like as with some immense beacon, impressed every onlooker with awe. Even the wind seemed to have been lulled by this terrific incident, and James, the naval historian, finely speaks of 'the trance into which all nature had been hushed by the catastrophe.' By midnight, of the eight French ships which had been engaged there remained still resisting only the *Tonnant*.

With regard to the five French ships in the rear, two—viz., *Heureux* and *Mercure*—withdrew from the line, ran themselves ashore, and afterwards hauled down their colours. At dawn the following morning there remained fighting, of that entire French fleet, which had once numbered thirteen, only four—the *Tonnant*, *Guillaume Tell*, *Généreux*, and *Timoléon*. Before midday, the *Guillaume Tell* and *Généreux* and two frigates made their escape. The *Timoléon* ran herself ashore. The *Tonnant* was a veritable wreck, but still lying at anchor and still with colours flying on August 3 when she was compelled to lower her ensign, and those of her crew still on board set her on fire. Thus, of the French thirteen line-of-battle ships, two had ended in flames, eight had surrendered, one had got ashore, and two escaped.

To the British fleet considerable damage had been done, and principally in regard to masts and rigging, but the *Bellerophon* had been entirely

dismasted and her hull severely damaged. This was hardly surprising, considering she had the three-decker *Orient* as her opposite number. Of the second phase of the battle Nelson wrote: 'I then pressed further towards the Rear; and had it pleased God that I had not been wounded and stone blind, there cannot be a doubt but that every ship would have been in our possession.' For, early in the fight, this gallant admiral had been struck by a splinter above his right eye.

There was only one actual loss to Nelson's ships, and that happened after the battle. He had sent the *Leander* with despatches for Lord St. Vincent, then off Cadiz, but about August 17 she fell in with the escaping *Généreux* and was captured after a fight against superior strength. The *Culloden*, aided by the *Mutine* and by the exercise of some interesting seamanship, managed to float off on August 2, but not without damage to hull and rudder. It is interesting to note, in passing, that among the French prisoners were several masters and pilots of those transports lying in Alexandria.

Apart from its deep historical interest, apart from its annihilating effect, there is something so picturesque and dramatic in the battle of the Nile, that it leaves for ever in the mind an ineffaceable picture. That night scene with its lights aboard each ship and the silhouetted rigging against the flashes of the guns and the flames, and the wreaths of smoke curling up from those wooden decks, the crashing of masts and yards, the wild, hoarse shouts of robust seamen—and then that wonderful still-

BATTLE OF THE NILE

To face p. 194

ness when it was all over and victory had come over that wreck-strewn bay. So soon as the conquest was decided, that wonderful little admiral —one-eyed, one-armed, and again wounded—sent orders through the fleet that every ship was to return thanks to Almighty God for the blessing on His Majesty's arms. And it needs little enough imagination to transpose ourselves back aboard those tattered ships among the men blackened with smoke, deaf with gunnery, dishevelled and dirty with sweat and grime, but standing there bareheaded with their own officers and French prisoners.

'I had the happiness to command a Band of Brothers,' wrote Nelson to Howe, and it was true in every sense. 'Nothing could withstand the squadron your lordship did me the honour to place under my command,' wrote Nelson to St. Vincent on August 3. 'Their high state of discipline is well known to you, and with the judgment of the captains, together with their valour and that of the officers and men of every description, it was absolutely irresistible.' And in reply St. Vincent began: 'My dear Admiral, God be praised, and you and your gallant band rewarded by a grateful country for the greatest achievement the history of the world can produce.' 'I cannot, my dear friend, express how great my joy is for the complete and glorious victory you have obtained over the French,' wrote Collingwood, 'the most decisive, and in its consequences perhaps the most important to Europe that was ever won.' 'Your victory, my dear lord,' congratulated the great Admiral Lord

Hood, 'is the most complete and splendid history records . . . your lordship has preserved from anarchy, distress, and misery, the greatest part of Europe.'

But there is nothing in the above expressions that has been modified by subsequent historical investigation. 'The fatal engagement of Aboukir,' wrote a distinguished Frenchman, 'ruined all our hopes; it prevented us from receiving the remainder of the forces which were destined for us . . . it was no longer possible for us to dream of giving the English any uneasiness in India.' The news of the defeat of his fleet reached Napoleon by the middle of August, and he realized that this meant the stoppage of all supplies to his army now that the command of the sea had passed to the British. This annihilation not merely had a moral effect on his troops, but brought about an international coalition in Europe against France, and this at a time when her finest soldiers were practically British prisoners cut off from their homeland. With the blockade that followed we are not concerned in our present inquiry, though it may be mentioned in Spencer's words as being no easy matter. 'I recollect perfectly well that the blockade of Alexandria,' he wrote to Dundas, 'which was maintained by Captain Miller in the *Theseus*, and afterwards by Captain Troubridge in the autumn of 1798, subsequent to the battle of the Nile, is represented as extremely difficult, in consequence of the badness of the weather and danger of the coast, and was at last obliged to be relinquished for that cause, after we had lost all the small vessels which we had

THE "ORIENT" ON FIRE

To face p. 196

there, and very near lost the vessels which were sent for the purpose of bombarding the town.' For, as we saw in the Great War with Germany, 'the command of the sea,' to quote a living admiral's* phrase, 'is not merely a matter of a few very powerful battleships, but one demanding the services of numerous vessels of all the smaller classes.'

Nelson well knew that the battle of the Nile had saved India, and a week later he sent Lieutenant Duval, via Aleppo, Bagdad, and the Tigris, down to Basra, and so from there in the *Fly* packet to Bombay, where he delivered despatches to the Governor. The *Leander* having been captured, it was by means of the brig *Mutine* that the official despatches reached Naples, and thence England. Thus, the immediate effect of this victory was to remove all threat which menaced India, and it freed the British fleet in the Mediterranean for any other operations that might arise, since the blockade of Alexandria could be performed by merely a few craft.

But, again, we have a clear lesson from Napoleon's strategic misunderstanding of a fleet's utility and office that even the greatest of generals is out of his sphere in dealing with naval warfare. 'Bonaparte's plan,' wrote Admiral Mahan, 'had been sagaciously drawn on the lines of a military operation; it broke down at the point wherein its conditions differed from those of land warfare.

* Admiral H. W. Richmond, 'Private Papers of George, second Earl Spencer,' vol. iv., Navy Records Society, London, 1924.

Bonaparte, to quote a French author, never attained "le sentiment exact des difficultés maritimes." The army had advanced into the enemy's country; it had seized its first objective; but the blow was not fatal, and its own communications were in deadly danger. There was no relieving force to throw in supplies and reinforcements, as to Gibraltar twenty years before, because the hostile navy controlled the intervening country—the sea.'

Thus, Napoleon had from the first committed his army to a false plan. And he himself was lucky months after to escape in a frigate owing to the temporary absence of the blockading squadron, which had sailed to Cyprus to get water. The lessons to be learned from this are too obvious to need emphasizing.

CHAPTER IX

BATTLE OF TRAFALGAR, 1805.

The Peace of Amiens, signed in March, 1802, between Britain and France, brought about a truce in the great Napoleonic contest. After the successful conclusion of the Nile campaign, of which we have considered the battle in Aboukir Bay, British statesmen had the opportunity to dictate strong terms. But those who complain that too often the achievements of our fighting forces have been ruined by the politicians and statesmen in the clauses of the subsequent treaty will find an instance in Amiens. With certain exceptions, Britain was to restore by this agreement her conquests, and it was clear that this was in effect a truce rather than a treaty; a state of suspended hostilities in order to give the enemy time to turn round and renew his schemes of aggrandizement. The Napoleonic scare was still a very real thing: the war to end the French wars had yet to come.

In May, 1803, war was declared against both France and Spain, and in that year we find Nelson now Commander-in-Chief in the Mediterranean. After the battle of the Nile he had been rewarded with a peerage and a pension. We may pass over the intervening events, which include the attack on Copenhagen, and find him blockading the French in Toulon. The object of this was the highly

important one of preventing the junction of the French fleets and the invasion of England which might result. In order to neutralize the enemy's efforts, Britain utilized blockading methods on a large scale. Thus Cornwallis was operating with his vessels off Brest, Calder off Ferrol, Orde off Cadiz, besides Nelson off Toulon. There were, too, French squadrons in Rochefort and Lorient.

Now if certain of these French squadrons could concentrate in one mighty fleet, the aim of Napoleon was to get command of the English Channel, and then the invasion of England would be a practicable plan. The battle of the Nile had killed the Eastern plan, and Napoleon had returned to his original idea. Now in what way did he hope to get command of the Channel? The answer is, by a feint: he hoped to divert the attention of Britain away from the English Channel across the other side of the Atlantic. This was actually attempted in a twofold manner, and it is this plotting and counter-plotting, this mental contest of consummate personalities, which make the campaign so extraordinarily fascinating.

The Rochefort squadron got away and made for the West Indies, and was chased by Cochrane. In March, 1805, the French fleet escaped from Toulon, and made for the West Indies also. It may be mentioned here that the admiral of this Toulon fleet was Villeneuve, who had been in command of the rear division of the French fleet at the battle of the Nile. Napoleon intended a concentration of the French fleets in the West Indies at Martinique, whence they were to return

to Europe, unite with the Spanish fleet, and proceed to the English Channel. Having enticed Nelson out of the way, Bonaparte hoped, with the security of the Allied fleet, to transport across from Boulogne that mighty army of invasion which had been already collected.

But the essential basis for Napoleon's scheme broke down. Although Villeneuve reached the West Indies, the Brest fleet which should have joined him had been unable to break through the British blockade, and thus the necessary concentration did not take place. Villeneuve sailed back again across the Atlantic and made Ferrol, and off that port encountered Calder's squadron, losing two of the Spanish ships which had joined the French admiral. Nelson had raced across the Atlantic to the West Indies and back to Europe without finding Villeneuve, and had actually reached Spanish waters before his enemy. From Ferrol Villeneuve managed to escape to Cadiz, whilst most of the British fleet were off Brest. But the net result to Napoleon was that the French fleet's concentration had been rendered impossible, therefore the command of the Channel was not his, and consequently it was not possible to carry his army across in guaranteed safety. For that reason, then, the camp at Boulogne had to be broken up.

This brings us, then, to the end of September, 1805, when Nelson is with his fleet off Cadiz. On October 19, by the orders of Napoleon, the Franco-Spanish fleet put to sea with thirty-three ships-of-the-line, and at first sailed south, but, on the morning of the 21st, Villeneuve turned north in

order to get Cadiz under his lee. We are now on the eve of the great battle which took place to the west of Cape Trafalgar, in those waters which had been famous ever since Elizabethan times for the exploits of English sailormen. And, before we consider the approach of the rival fleets, let us take a look into the mind of Nelson, and consider the aspect through his eyes. There is such ample documentary evidence that we can get a fair insight during those anxious waiting days. And nothing is more illuminating than his correspondence during those last few weeks preceding his death, when, with his old friend Collingwood as second-in-command of the fleet, he was cruising and planning for the great day that must now come very soon, when the enemy's fleet would appear.

'Day by day, my dear friend,' he wrote aboard the *Victory* to Alexander Davison, 'I am expecting the Fleet to put to sea—every day, hour, and moment; and you may rely that, if it is in the power of man to get at them, that it shall be done; and I am sure that all my brethren look to that day as the finish of our laborious cruise. . . . I have two Frigates gone for more information, and we all hope for a meeting with the Enemy. Nothing can be finer than the Fleet under my command.'

And only a fortnight before the battle, when the *Victory* was sixteen miles to the west of Cadiz, Nelson was writing to another friend: 'I verily believe the Country will soon be put to some expense for my account, either a Monument, or a new Pension and Honours; for I have not the very smallest doubt but that in a very few days, almost

HORATIO, VISCOUNT NELSON

To face p. 202

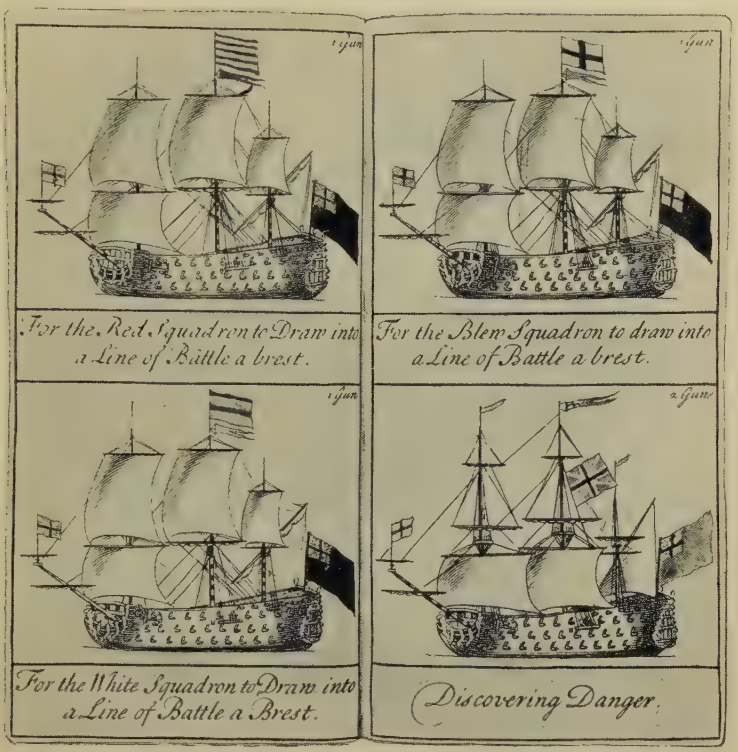
hours, will put us in Battle; the success no man can ensure, but the fighting them, if they are to be got at, I pledge myself, and if the force arrives which is intended . . . it is, as Mr. Pitt knows, annihilation that the Country wants, and not merely a splendid Victory of twenty-three to thirty-six,—honourable to the parties concerned, but absolutely useless in the extended scale to bring Buonaparte to his marrow-bones: numbers only can annihilate.' And on the same day he wrote expressing his feelings to Admiral Gambier: 'The Enemy I have no doubt will very soon put to Sea. I am dying with anxiety for frigates; as yet I can only get two, but I have ordered all I am within reach of, for less than eight and three good Brigs are not sufficient for this above all others important service of watching the Enemy's movements and to be with the fleet on the day of the Battle. I am sorry to be obliged at this moment to reduce my Force so low as twenty-three Sail of the Line, but if I did not begin the whole fleet in three weeks must have gone inside the Mediterranean.'

Long before the battle Nelson's plans had been formulated, and we can picture him in his cabin writing that historic Memorandum on October 9. 'My dear Coll.,' he wrote as a covering letter to Collingwood, '. . . I send you my Plan of Attack, as far as a man dare venture to guess at the very uncertain position the enemy may be found in. But, my dear friend, it is to place you perfectly at ease respecting my intentions, and to give full scope to your judgment for carrying them into effect.'

The original holograph draft of this Memorandum

was for many years in private hands, but in the year 1910 it was secured for the nation and placed in the British Museum, where it now remains. Its length is too great to allow its reproduction in this volume, but there are certain sentences which may well be quoted in order to compare Nelson's pre-battle intentions with what actually took place. Owing to Nelson's death at Trafalgar, posterity has been deprived of that invaluable report which the gallant Commander-in-Chief would have written to the Admiralty. Consequently controversies have arisen as to whether Nelson did or did not carry out those intentions which this document embodied. It is, however, conceded by some eminent historians that the main idea of the memorandum was carried out, though in minor tactics it was not.

Nelson had, however, determined on the principle of 'placing the Fleet in two lines,' and he was careful to emphasize the following points: 'The Second in Command will, after my intentions are made known to him, have the entire direction of his Line; to make the attack upon the enemy, and to follow up the blow until they are captured or destroyed.' Nelson further intimated that he would 'probably make the Second in Command's signal to lead through' the enemy's line at 'about their twelfth ship from their rear,' whilst Nelson's own line 'would lead through about their centre.' 'The whole impression of the British Fleet must be to overpower from two or three ships ahead of their [*i.e.*, the enemy's] Commander-in-Chief, supposed to be in the centre, to the rear of their Fleet.' And again, 'the entire management of the Lee Line,


1 Gun
For the Red Squadron to Draw into a Line of Battle a brest.
1 Gun
For the Blew Squadron to draw into a Line of Battle a brest.
1 Gun
For the White Squadron to Draw into a Line of Battle a Brest.
2 Guns
Discovering Danger.

BRITISH NAVAL SIGNALS

(From a hand-painted pocket-book in the possession of Admiral Lord Northesk, third in command at Trafalgar.)

To face p. 204

after the intentions of the Commander-in-Chief are signified, is intended to be left to the judgment of the Admiral commanding that Line.'

It may be at once stated that in regard to the above principles the 'Nelson touch' was actually carried out in the battle. We may now come to October 19, and we can see just what is in Nelson's mind as he sits down that day to write his last letters. He is fully prepared for the great climax of his distinguished professional career; he is deeply conscious of the great national task which on him rests, yet he has made known his battle-plans, and nothing now remains but to wait just a few hours. At noon, on that nineteenth and windless day, when the *Victory* was sixteen leagues W.S.W. of Cadiz, he writes to Lady Hamilton: 'The signal has been made that the Enemy's Combined Fleet are coming out of Port. We have very little wind, so that I have no hopes of seeing them before to-morrow. May the God of Battles crown my endeavours with success.' To his daughter Horatia he writes: 'The Combined Fleets of the enemy are now reported to be coming out of Cadiz.' But on that same day he had also sent a note across to Admiral Collingwood, in which he remarks: 'What a beautiful day! Will you be tempted out of your ship? If you will, hoist the Assent and *Victory's* pendants.' It was the last time that his old friend was to receive a message in that handwriting.

We shall now be able to follow the British fleet from midnight of October 19-20, and, in so doing, we shall find great assistance in studying that admirable Admiralty report on the evidence re-

lating to Nelson's tactics at Trafalgar. It was in 1912 that their Lordships appointed two distinguished Admirals and the Regius Professor of Modern History in the University of Oxford to examine all the evidence on this subject. And twelve months before we were involved with war against Germany the above committee issued their findings. This well-documented narrative is invaluable for a study of the last most notable sea-battle in British naval history prior to the naval operations of the Great War.

But before we avail ourselves of this and other material let us see in imagination the Franco-Spanish fleet under Admiral Villeneuve beginning to come out with a light northerly breeze at seven o'clock on the morning of October 19 from Cadiz harbour. The enemy fleet was being watched and reported by Nelson's frigates. Now one of these frigates was the *Euryalus*, under the command of Captain the Hon. Henry Blackwood, and I cannot resist quoting the following interesting remarks which this officer wrote that day in a letter to his wife, as it sheds illumination on the work of the cruisers at that time. 'At this moment,' says Captain Blackwood, 'the Enemy are coming out, and as if determined to have a fair fight; all night they have been making signals, and the morning showed them to us getting under sail. They have thirty-four sail of the line and five Frigates. Lord Nelson, I am sorry to say, has but twenty-seven sail of the line with him; the rest are at Gibraltar, getting water. . . . Within two hours, though our Fleet was at sixteen leagues off, I have let

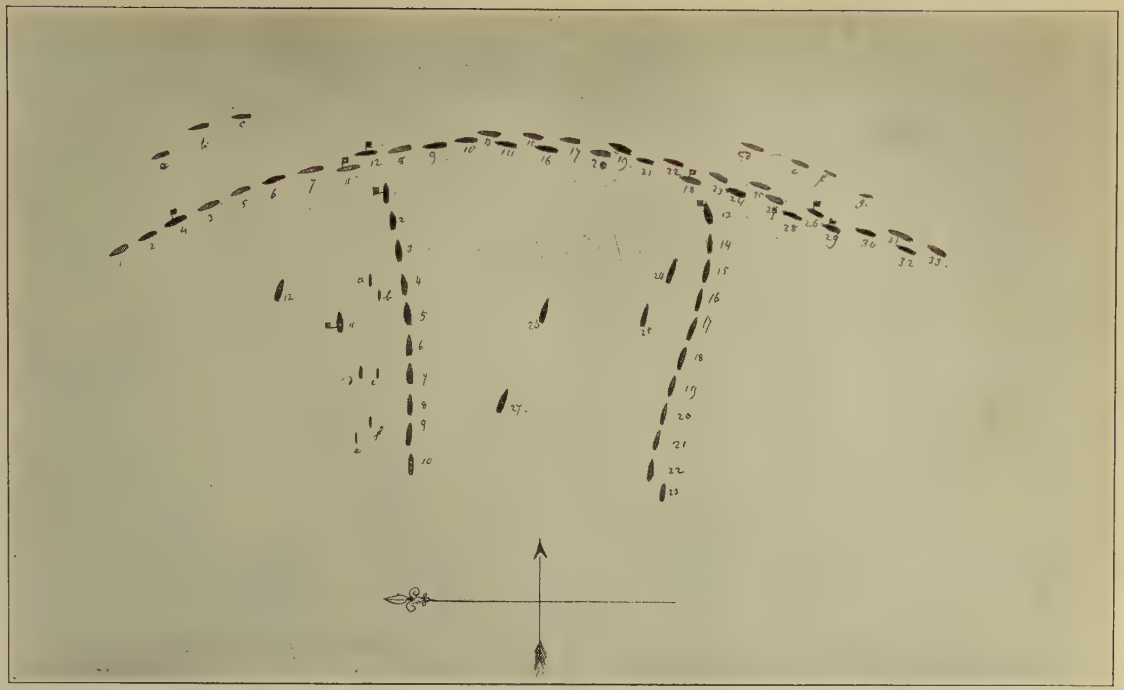
Lord N. know of their coming out, and I have been enabled to send a vessel off to Gibraltar, which will bring Admiral Louis and the ships in there, out. At this moment we are within four miles of the Enemy, and talking to Lord Nelson by means of Sir H. Popham's signals, though so distant, but repeated along by the rest of the Frigates of this Squadron.'

And in this connection we may be permitted to say a few words by way of explaining the signalling at Trafalgar. It was Lord Howe, the hero of the Glorious First of June, who completely revolutionized matters so that the basis of the tactical code became no longer the Fighting Instructions (which had been issued by Russel in 1691 and continued till after the battle of the Saints in 1782) but the Signal Book. In 1793 Howe's Signal Book, a new code of signals, superseded the 'Sailing and Fighting Instructions for His Majesty's Fleet.' But the first officially compiled signal book for the British Navy was the 'Signal Book for the Ships of War' of the year 1799. This code continued until the year 1816, when an entirely new signal book was adopted, based on Sir Home Popham's code. It was in 1803 that Captain Sir Home Popham, R.N., had his 'telegraphic' marine vocabulary printed, and this was employed at Trafalgar not merely by the frigates, as Captain Blackwood's letter shows, but Nelson's historic signal, made in twelve hoists, 'England expects That Every Man Will Do His DUTY,' was made by this Popham system.

At midnight on October 19-20, the British fleet

was expectant but not in any precise order or formation. On the 20th there was a S.S.W. wind with thick weather, but it cleared in the afternoon, and then, after the British fleet had been sighted, Villeneuve cleared for action. The fleet action did not take place that day, and Nelson even thought it probable the enemy would sail back into harbour before night. But at 5.50 on the morning of the 21st—that is, as soon as the light permitted, the *Achille* (one of the 74's) signalled the *Victory*, 'Have discovered a strange fleet.' Twenty minutes later the *Victory* made the general signal, 'Form the order of sailing in two columns.'

Now it is to be borne in mind that the wind was light and variable and that the British fleet was still in no precise formation when this signal was made. The entry in the log of Thomas Atkinson, Master of the *Victory*, for Monday, October 21, reads: 'At 6 observed the Enemy bearing E b S Diss^{e} 10 or 12 miles. Bore up to the East^{d}. Out all reefs Top Sails. Set Steering Sails & Royals. Cleared for Quarters. At eight Light breezes & Cloudy. Body of the Enemy's fleet E b S—9 miles. The Enemy's Line forming from NNE to SSW—consisting of 33 Sail of the Line—3 Friga [*sic*] & 2 Brigs—Still standing for the Enemy's Van—the *Royal Sovereign* & Her Line. Steering for the Centre of the Enemy's Line. At 11.30 The Enemy commenced firing on the *Royal Sovereign*. At 11.40 the *Royal Sovereign* commenced firing on the Enemy. At 11.50 The Enemy began firing upon us. At 4 Minuits past 12 open'd our Fire on the Enemy's Van.'



BATTLE OF TRAFALGAR: PLAN

This plan shows the eighteen French and fifteen Spanish ships in line ahead steering towards the north. The two columns of the British fleet are advancing to break this line.

To face p. 208

As a result of Nelson's 6.10 a.m. signal, the two columns bore up to the eastward under all sail, which was in accordance with the plan outlined in the memorandum already mentioned. Vice-Admiral Collingwood's column was the starboard or lee column, with his flag in the *Royal Sovereign;* Nelson's was the port column or van, with his flag in the *Victory.* Both flagships set their stun'sls about six that morning, and most of the other British ships about two hours later. Thus Villeneuve realized that an action was imminent, and signalled his ships to form the prearranged order of battle. The Allied fleet had been heading to the south on the starboard tack, but was now ordered to wear together and form the line in close order on the port tack. But the wind was so scant, and there was such an Atlantic swell, that it took some time to carry out this manœuvre. These great sailing ships were not handy, and in the present conditions they were for some time without steerage way; consequently, when the evolution was completed about ten that forenoon, Villeneuve's fleet on the port tack, heading roughly north and south, formed not a regular line, but, in the words of Admiral Collingwood's official report, 'a crescent, convexing to leeward, so that in leading down to the centre I had both their van and rear abaft the beam.'

It had been Villeneuve's plan that, if the British fleet were to windward, the Allied fleet was to await the attack in close line-of-battle. Villeneuve also prophesied that Nelson would 'endeavour to turn our rear, to pass through our line, and such

of our ships as he may succeed in cutting off, will endeavour to surround and reduce with groups of his own.' Collingwood distinctly says that 'the enemy's line consisted of thirty-three ships (of which eighteen were French and fifteen Spanish),' and that they had 'formed their line of battle with great closeness and correctness.'

Villeneuve wrote that the British fleet did seem to concentrate on the Allied rear, 'avec le double motif de la combattre avec avantage et de couper à l'armée combinée la retraite sur Cadix.' Villeneuve, indeed, by placing his line as he did, created just that situation which we have seen was contemplated by Nelson's Memorandum. These words may here be quoted: 'Of the intended attack from to windward, the enemy in Line of Battle ready to receive an attack: The divisions of the British Fleet will be brought nearly within gunshot of the Enemy's centre. The signal will most probably then be made for the Lee Line to bear up together; to set all their sails, even steering sails, in order to get as quickly as possible to the Enemy's Line, and to cut through, beginning from the twelfth ship from the Enemy's rear.'

The British fleet seemed to bring the wind along with them, and they had crowded on all sail, but, owing to their difference in hull design, trim, and state of bottom, as well as to the flukiness of the breeze, there was not a rigid formation of the two columns as in our own days is possible with engines and revolution-indicators in warships. The British fleet consisted of twenty-seven line-of-battle ships, of which the *Victory*, *Royal Sovereign*, and

"VICTORY" BREAKING THE ENEMY'S LINE

To face p. 210

Britannia were 100-gun vessels, the rest comprised four 98's, one 80, sixteen 74's, and three 64's. In addition there were four frigates and two small craft. The French fleet consisted of four 80's, fourteen 74's; while the Spanish fleet consisted of the 130-gun *Santissima Trinidad*, the *Principe de Asturias*, and *Santa Ana*—both of 112 guns—the 100-gun *Rayo*, two 80's, eight 74's, one 64. Total Allied strength, thirty-three, in addition to five frigates and two brigs.

Nelson, as Commander-in-Chief, was leading the northern, or weather, or van column of twelve ships with his flag in *Victory*. Collingwood, in *Royal Sovereign*, was leading the starboard column with fifteen ships. As prearranged by that Memorandum, Collingwood's column was to cut through the enemy's rear: Nelson's column to prevent the rest of the enemy from interfering with Collingwood's operations. The latter's line, for the reasons stated, was irregular, ships were out of station, and some were nearer the head of the column than others. Thus some of them were engaged much sooner.

How closely was the plan adhered to may be seen from Collingwood's official despatch. 'The Commander-in-Chief, in the *Victory*, led the weather column, and the *Royal Sovereign*, which bore my flag, the lee. The action began at twelve o'clock by the leading ships of the column breaking through the enemy's line, the Commander-in-Chief about the tenth ship from the van, the Second-in-Command about the twelfth from the rear, leaving the van of the enemy unoccupied, the succeeding

ships breaking through in all parts, astern of their leaders, and engaging the enemy at the muzzles of their guns.' Actually Collingwood cut off fifteen ships, for three of the enemy were to leeward of the line. It was twenty-five minutes after the *Royal Sovereign* commenced action that Nelson's column engaged, and it attacked the centre, a feint having been made of attacking the enemy's van. After bearing a little to port, Nelson bore away to starboard, passing down the enemy's line, and broke through that line astern of the *Bucentaure*, which was Villeneuve's flagship and the eleventh vessel from the van. 'My Line would lead through about their centre.' Nelson had carried out his intention.

Of Nelson's column the first five ships were *Victory*, *Téméraire*, *Neptune*, *Conqueror*, and *Leviathan*. The first-mentioned became almost abreast but slightly ahead of the next two, whilst the fourth and fifth were close behind and to port. Collingwood says that 'as the mode of our attack had been previously determined on and communicated to the Flag Officers and Captains, few signals were necessary, and none were made except to direct close order as the lines bore down.' But we do know that among others Nelson made the signal, 'I intend to pass or go through the enemy's line, to prevent them getting into Cadiz.' This was answered by *Royal Sovereign* at 11.40 a.m. It was eight minutes later that *Victory* made the general signal, 'England expects that every man will do his duty'; and at 12.15 p.m. *Victory* again made a general signal, 'Engage the enemy more closely.'

H.M.S. "VICTORY"

To face p. 212

In his journal Collingwood wrote that the *Royal Sovereign* 'opened a fire on the 12th, 13th, 14th, and 15th Ships from the Enemy's Rear, and stood with all sail to break the Enemy's Line. ¼ past 12, altered Course to port, and in passing close under the stern of the *Santa Ana*, a Spanish three-deck Ship, with a Vice-Admiral's Flag, raked her, and sheering up on her Starboard Quarter, began a very close Action;—at this time the *Mars*, *Tonnant*, and *Belleisle* had just broke through the Enemy's line, and were beginning to engage warmly: the smoke soon became so thick, that more of the Management of other Ships could not be distinguished.' The *Santa Ana* was the flagship of the Spanish Vice-Admiral Don Ignatius Maria de Alava. To detail every ship action during the battle would be impossible within this chapter, and would blur the effect aimed at. The fighting resolved itself into close range attack, so close in fact that in certain instances the guns were almost muzzle to muzzle. Incessant was the fire, but after about three hours many of the enemy's ships had struck their colours and their line had given way.

The Spanish Admiral Gravina, in the *Principe de Asturias*, who was almost at the extreme southern end of the Allied line, with ten ships joined the enemy's frigates to leeward, and made off in the direction of Cadiz. The five headmost ships of the enemy's van tacked, stood to the southward, to windward of the British fleet, were attacked and the sternmost of them captured, yet the others got away. But of the whole Allied fleet His Majesty's forces were able to take no fewer than nineteen

ships-of-the-line, including those fine flagships *Bucentaure*, *Santa Ana*, and *Santissima Trinidad*, together with three flag-officers—Vice-Admiral Villeneuve (Commander-in-Chief), Vice-Admiral de Alava, and Rear-Admiral Cisneros.

Of the British losses the most grievous was the death of Nelson, owing to a musket ball. In material loss the *Royal Sovereign* suffered severely, having been dismasted save for a tottering foremast, so that Captain Blackwood's *Euryalus* had to make Admiral Collingwood's signals eventually, and after the action Collingwood's flag was shifted to her. But many other of the British ships were dismasted, and the whole fleet was in danger of the Trafalgar shoals. And when this admiral made the signal to prepare to anchor there were few of his fleet which had an anchor to let go. Fortunately, however, the wind shifted a few points during the night and drifted most of the ships off the land. 'Ever since last evening,' wrote Captain Blackwood from the *Euryalus* on the night of Tuesday, October 22, 'we have had a most dreadful gale of wind,' so that it was only with difficulty that the prizes and the ships towing them were able to keep from getting ashore. And the last sentence in his letter is expressive of that suspense and vigilance and anxiety of the British fleet during the last four days. 'This is the first night I shall be undressed since Saturday,' he concludes. Even as late as October 27 Captain Hardy, who had just received orders to make for Gibraltar, in writing home to a friend, remarked: 'The weather ever since the Action has been so bad that we have had some

Difficulty to save our shattered ship, and have had no communication with any of the Fleet. . . . The *Victory* is in so nude a state that she must be ordered to England.' 'Our prizes you see are lost,' wrote Collingwood to his wife, 'but was there ever so complete a break-up of an enemy's fleet? If we have not saved them to ourselves, we have at least put them out of the power of doing further mischief.'

James, the naval historian, sums up the final fate of those nineteen captured French and Spanish ships as follows: One was accidentally burnt, and fourteen were either recaptured, wrecked, or they foundered or were destroyed, thus leaving only one French and three Spanish 74's as trophies to the conquerors. But this fact in no wise affects the great victory. As to the criticism which has been made on Nelson's tactics at Trafalgar, it will suffice if we select two of the leading naval historians of our own time, Admiral Mahan and Sir Julian Corbett. 'As a rule, in instructed naval warfare,' wrote Mahan, 'attack has been on one flank of that line. It is commonly spoken of as an attack on van or rear, because of the columnar formation of the ships, but it is really a flank attack; and whichever flank is chosen, the attack on the other is essentially refused, because the numbers devoted to it are not sufficient to press an attack home. The culmination of the sail era—Trafalgar—was fought exactly on these lines.' Mahan was referring to 'the one great principle of concentration . . . of so distributing your own force as to be superior to the enemy in one quarter, while in the other you hold

him in check long enough to permit your main attack to reach its full result.' Concentration: that is the basic principle of the Trafalgar tactics, and the reader may well compare this with the methods which have been employed in the previous battles already in this volume discussed.

Corbett, in his exhaustive study of the Trafalgar campaign, criticized Nelson's tactics as a 'mad, perpendicular attack, in which every recognized tactical card was in the enemy's hand. But Nelson's judgment was right,' because he knew that he could mystify the enemy as to what exactly were his intentions. But 'the risk he took of having the heads of two columns isolated by a loss of wind or crushed prematurely by the concentration to which he exposed them naked, almost passed the limits of sober leading. Its justification was its success,' for the British Commander-in-Chief relied on the high standard of his own ships and men, and on the lack of training and sea experience of the enemy.

But to us who have watched through these chapters the evolution of naval fighting, this last example of a great battle during the sailing-ship period cannot fail to be interesting, quite apart from the personality of Nelson and the international issues. For, notwithstanding what had evolved during the seventeenth and eighteenth centuries, in spite of all the naval engagements and long years of sea practice, Nelson's tactics on this final occasion really reverted to the point where the Elizabethan tacticians started. It ruled out the order of battle in single line-ahead, and re-established the sixteenth-century system of mutually

supporting squadrons in line-ahead: it was the principle of throwing one squadron in superior force upon one portion of the enemy's line and employing the other but inferior force for covering this attack.

Nelson, in the hour of his death, in the culmination of his great career as the greatest naval tactician who had ever lived, had won for Britain that 'annihilation that the country wants,' and gave to us for a hundred and nine years that peace which only victory at sea can provide. It remains for us now in our concluding section to see how three of the greatest sea-battles in the age of steamships were fought, and to take three different nationalities for that purpose.

PART III

THE AGE OF STEAM

CHAPTER X

BATTLE OF LISSA, 1866.

THE battle of Lissa will always be memorable in that it was the first action in which squadrons of iron-clads fought against each other. It is, in fact, the half-way in that wonderful development of the warship which took place between the battles of Trafalgar and the Falklands. It is additionally interesting because in its tactics there was employed a principle which only had to be tried in order to demonstrate its heresy.

In any battle by sea the object is to deliver the greatest number of effective blows in the shortest possible time; but it is essential that the weapon with which it is delivered be capable of being employed satisfactorily. This question will arise in due course; but, in order to appreciate the situation we must take a glance at the new conditions through which the ship had passed. At the time of Trafalgar the three-decker was the most powerful of warships, and the guns were arranged in three and even four tiers, but could hit only at point-blank ranges. It was a mixed armament, consisting of 32-pounders, 24-pounders, and 12-pounders, in addition to 68-pounder and 32-pounder carronades. The *Victory* had a total broadside of fifty-two guns. By 1838 there was being intro-

duced a uniformity of 32-pounder solid-shot guns, but this was only a temporary phrase.

It was in 1822 that a French officer, General Paixhans, suggested the use of shell instead of solid shot, and the destruction of the Turkish fleet at Sinope in 1854 proved the value of this new method against wooden ships. This, in turn, demanded another new method which should protect the wooden ships from the devastating shells, and it came in the form of iron. But other changes were coming from another direction. In the year 1801, four years before Trafalgar, the little *Charlotte Dundas* had demonstrated on the Forth and Clyde canal that a steamship was a practical possibility, and it is from her that all the steam-propelled vessels in the world are descended. But Dundas was First Lord of the Admiralty under Pitt from 1804-5, and made that historic and notorious pronouncement that it was the duty of the Admiralty 'to discourage to the utmost of their ability the employment of steam vessels, as they considered the introduction of steam vessels was calculated to strike a fatal blow to the naval supremacy of the Empire.'

But in 1821 the Admiralty purchased their first steam vessel, and between 1823 and 1840 there were added to the Royal Navy seventy steamers, the first iron warship being the paddle steamer *Nimrod* launched in 1839. About 1840 both the British and other navies began to introduce paddle frigates into service. These were built of wood, and then in 1845, as a result of that famous *Alecto-Rattler* tug of war, the future of the screw in preference to

paddles was assured. In the British Navy the *Highflyer*, a ship-rigged wooden corvette, built at Blackwall in 1850-1, was one of the first men-of-war to be fitted with a lifting screw. In America such craft as the steam frigate *Hartford* of 1858 may be taken as typical examples of their period.

But the period of transition from steam to sail was full of indecision and muddle-headedness, so that the Admiralty would begin building the old line-of-battle ships and frigates, too; hurry them forward, then stop work on them, and finally have them pulled to pieces. You get a very clear example of the administrative mind of the period 1855-60 when you recollect that quite a number of wooden three-deckers were constructed, but with steam and screw propeller. Still carrying an armament of 121 guns and those old-fashioned square ports and seventeenth-century stern-galleries, this class of vessel with her Nelsonian hull, yet steam engines, was in respect of guns, mountings, and projectiles not very different from, and curiously undeveloped since, the days of Elizabeth.

The *Howe* of 1860 was one of the last three-deckers, and now the speed of evolution increased. The Crimean War had definitely demonstrated that no unprotected wooden ship could endure the effects of shell fire, but it was the French who first selected a wooden two-decker and placed outside 5-inch armour plates with wood backing in the year 1859. And then came that historic French ironclad *La Gloire*, as a result of which there was born a new age, and Britain caused the *Warrior* to

be built as our first ironclad, an iron screw frigate of 9,000 tons displacement, protected with 4½-inch armour. She was armed with forty 110-pounder, rifled, breech-loading Armstrong guns, and set an entirely new pace in the development of the war-ship. Indeed, from her are descended all the modern navies of the world.

Now, in the course of its progress history is full of revivals of old ideas. The reader will recollect that after the battle of Lepanto the day of ramming tactics was past and gone. Through those Elizabethan times when our seamen showed their contempt for the galley type, right through the period of Drake's successors till sixty years after Trafalgar, the ram was as obsolete as the oar in battle. But the introduction of iron for the building of warships reintroduced the possible value of ramming tactics on the principle of the knock-out blow. From the time of the *Warrior* the ram went on developing, and in this battle of Lissa we see that strange reinstatement of an old-time usage. Iron has made the hull, as it had made those Mediterranean bronze-beaks, capable of being like a spear head, yet steam has given back to the war vessel a mobility which it possessed under oars but lost under sail. But having said so much, we may at once aver that when both ships have sea-room and are under control, ramming is both very difficult and to the attacking ship more dangerous than to the attacked. During the war with Germany we have recently seen this instanced both in regard to destroyers *versus* submarines and destroyers *versus* destroyers. In each case the

tactics were difficult, and in both cases, when successful, there resulted such damage to the attacker that the victorious craft was compelled to spend weeks in the dockyard hands. I have before my mind the sight of one of our destroyers being towed into harbour one spring afternoon of 1915, down by the head and considerably damaged after ramming and sinking a U-boat. But at Lissa there was a partial ramming success, and this result certainly influenced for some time the belief in the ram.

The three-deck line-of-battle ship, then, in the early second half of the nineteenth century, was giving way to the large one-decker armour-clad. Shells took the place of solid shot, the range was increased, sights were fitted to the guns, and artillery, after several centuries of undevelopment, became, during this industrial age, really efficient. Improvement followed improvement, and the race commenced between the gun and armour, between shells and protection, which still goes on. The defensive word 'ironclad' shows how scared were naval minds by the introduction of shell, whereas in Nelson's times an 'offensive' attitude was used, so that ships were reckoned in terms of their number of guns. She was a 120, or an 80, or a 74, and the temporary popularity of the ram was due to the fact that the gun had been temporarily beaten by armour protection.

With these necessary facts before us we are now in a position to approach the battle of Lissa, which was fought at a time when ironclads were still novelties, and the *Warrior's* influence was still

something rather wonderful. But both Italy and Austria had already possessed a squadron of armoured ships, and although some of the units employed in this fight were obsolete, it cannot be denied that the main strength of the opposing fleets consisted of craft less than five years old. Several of them, indeed, were of the highest contemporary order, having been constructed in leading British and French yards. The Italian fleet itself was not more than five years old as an institution, and knew nothing of war. The Austrian fleet had experienced something of warfare, but neither was in an efficient condition. The Italian fleet in number of men and guns and size of ships was superior to the Austrians, but the Italian Commander-in-Chief was distinctly inferior to the Austrian admiral both in fighting spirit and professional ability.

The cause of the war between Austria and Italy was the mid-nineteenth century struggle between Austria and Prussia for supremacy in Germany, and the desire of Italy to free Lombardy and Venetia from the dominion of Austria. This culminated in the hostilities of the year 1866. Preparations began in April for the inevitable conflict, and on June 20 declaration of war was made by Italy. It was not till exactly one month later that off Lissa the two fleets met to fight the first battle fought between armoured fleets in the open sea. The Commander-in-Chief of the Austrian forces was Rear-Admiral Wilhelm von Tegetthoff, aged only thirty-nine. (Nelson was forty-seven years of age when he

died.) The Italian Commander-in-Chief was Admiral Count Carlo Pellion di Persano, already sixty years old. Thus at once we see an obvious difference in mentalities between the young warrior and the old man.

Tegetthoff was resolved to fight and defeat the enemy; Persano was of the dilly-dally, delaying, undecided, feeble temperament which never wins contests and ruins the spirits of those compelled to serve under him. There could be no greater difference found in naval history than that between the character of Nelson and Persano. Tegetthoff believed for his purpose in the ram rather than in the gun. But if Tegetthoff was clear-minded with one big single motive, Persano never seemed to realize that his first and great duty was to defeat the Austrian fleet. His inactivity, his muddle-headed tactics in battle, and his weak organization were ruinous. Most battles are won in the pre-war days of preparation. Lissa was no exception to this rule, and it was lost before it began. The Italian fleet lost that battle not because of material, but moral and intellectual inferiority; not because Persano did not know that Tegetthoff was about to use the ram, but because the Italian admiral did not previously provide a tactical method of beating that manner. If you wish to attack by ramming, you must obviously keep end-on to the enemy—this was Tegetthoff's tactical method. If you intend to rely on guns and gunnery, you must get on a course parallel, not vertical, to the enemy. If Persano relied on his artillery for sinking the Austrian fleet, he should have got his ships in such

a position as to concentrate the greatest amount of gunfire; and this means broadside to broadside. In actuality Persano failed to do this.

There are many features of this battle to criticize. One is that the gun was never fully employed. But even in the preliminaries to the fight there are points of amazing surprise to us. Tegetthoff was operating with and under the orders of the Archduke Albrecht, Commander-in-Chief of the Austrian army. Now Tegetthoff was instructed that naval operations must not be extended beyond Lissa, and that the mouth of the Po and the Venetian coast must be protected. Lissa, the reader will remember, is an island in the Adriatic off the Dalmatian coast, and it was off here that the British had defeated the Franco-Venetian fleet six years after Trafalgar. In the early hours of June 27, Tegetthoff's fleet, consisting now of fourteen ships, having proceeded from Pola, arrived off the Italian port, Ancona, where eleven ironclads and six other vessels were assembled. But such was the lack of preparedness and such the lack of spirit that no Italian ship came out, and by sunset Tegetthoff was back in Pola.

It is, however, amusing to note that even the Austrian fleet was not yet wholly prepared, and a new signal book was about to be completed and the ships to be exercised in steam tactics. Equally remarkable is the fact that, whilst still in a state of war, Tegetthoff now for three days allowed fires to be drawn and boilers cleaned in all ships; in other words, for that period his fleet was as if it failed to

exist. As to Persano, a moral coward if ever there was one, he was continually telegraphing to the Minister of Marine, who was anxious to have that fleet put to sea, asking unnecessarily for further orders, and even disobeying explicit instructions, 'Put to sea to-night.' On July 8 the fleet was persuaded out, did some drills and tactics, but no gunnery, in spite of the fact that many of the new guns had never been fired. On July 13 it was back in Ancona, and finally the Minister of Marine himself had to come aboard. But on July 16 it put to sea again, this time with the object of making a sudden descent on Lissa. Now, two things are here to be noted: (1) Just as during the recent war a British attack on the island of Borkum would have inevitably drawn out the German fleet, so an attack on the island of Lissa must draw down the Austrian. (2) But this possibility seems entirely to have been ignored by the Italian high command, and indeed the position and possible movements of Tegetthoff appear to have been ignored absolutely. To Nelson such an attitude would have been unthinkable.

The Italian fleet at this departure consisted of eleven ironclads, four screw frigates, three corvettes, four despatch vessels, a hospital ship, and a store-ship. Later in the day there joined three screw gunboats and another despatch vessel. The fleet had no reliable chart of Lissa, and on the morning of July 18 appeared to the north-west of that island. On that day Persano was joined by another screw frigate, and the day following by the *Affondatore*, on which he had placed a great deal of hope. This was an ironclad with a ram of 4,070 tons, with two

Armstrong guns on the turret principle. She had been built in England, and only just completed her fitting-out. His strength, therefore, was twelve ironclads, five unarmoured frigates, three unarmed corvettes, and three unarmoured gunboats, besides despatch vessels. One of the latter, named the *Esploratore*, 1,000 tons, was ordered to steam on a patrol between Punta Blanca, on the Dalmatian coast, and the island of St. Andrea, to look out for the enemy. The twelve ironclads varied from 2,000 to 5,700 tons each, armed in the case of the *Re di Portogallo* and the *Affondatore* with a pair of Armstrong 10-inch guns each. Of this dozen vessels the *Re d'Italia*, the *Palestro*, and the *Varese* each had two Armstrong 8-inch guns. The *Re di Portogallo* mounted twenty-six other guns, the *Re d'Italia* thirty-four other guns, the *Palestro* three others, the *Varese* two others. The rest of the dozen ironclads had a total of twenty or more guns. All ships were propelled either by screw or paddles.

Tegetthoff's fleet was made up of three divisions. The first consisted of seven wooden but ironclad frigates, varying from 3,065 to 5,130 tons, armed with eighteen to thirty guns. In this squadron also was the 1,470-ton paddler *Elizabeth*, of wood, unarmoured. The second division consisted of nine unarmoured ships of from 1,400 to 5,194 tons, including an old screw battleship of 92 guns, five screw frigates, one screw corvette, and two other steamers, one of which was not armed at all; another had only two guns, and the rest had a miscellaneous armament. The third division consisted

of seven screw gunboats, two screw schooners, and a paddler. Thus, in comparing the two fleets, Persano had twelve ironclads to Tegetthoff's six, and this must be borne in mind at the battle.

It was only the direct intervention of the King which had finally caused Persano to put to sea, but even then the Commander-in-Chief's conduct continued to be curious. The cable connecting the shore with Lissa was not immediately cut, and no careful detailed arrangements for the attack on Lissa were made. Persano's plan was to occupy the attention of the defenders by means of his ships at two distant points, whilst a landing was being made at two other points. The dividing up of his fleet was an error. Briefly, that which happened was as follows: Persano's ships were sighted on the morning approaching the island, and at 8.30 a.m. a telegram via the cable connecting the shore was despatched, and the news of the Italian approach reached Tegetthoff at 11 a.m. It was not till the late afternoon that the cable was cut. On that day the port batteries of San Giorgio on the north side of Lissa were attacked by some of the Italian vessels, the outer works silenced, but the attempt to enter the harbour failed, as did two efforts to land.

On the 19th the attack was resumed, the ironclad corvette *Formidabile* entered the harbour, but was exposed to the fire of the batteries, and was compelled to retire, and eventually had to be sent back to Ancona too damaged to fight in the fleet action which was to come. Thus Persano had lost at least one of his units without anything

tangible resulting. On this July 19 the attempt to land also failed, and next day it was intended to renew the attack. Now consider the mind of Persano. His ships were already running short of coal, and he might know that Tegetthoff's fleet would arrive at any hour. The distance from Fasana, Pola, where the Austrian fleet was lying, to Lissa was only 150 miles. Persano was well aware that before the cable had been cut a telegram had arrived saying that the Austrian fleet would sail on the evening of the eighteenth for Lissa, though actually Tegetthoff delayed till the afternoon of the 19th before putting to sea. Still, this in nowise frees the Italian Commander-in-Chief from his unpreparedness to fight what was an inevitable battle. On the other hand, Tegetthoff delayed partly because he imagined that the attack on Lissa was a mere feint.

At 1.30 p.m. on the 19th Tegetthoff with his fleet, his flag in the ironclad frigate *Ferdinand Max*, was steaming down the Adriatic. His first division of armoured ships were in the first line, then came the heavy unarmoured ships, and then the third division of small craft, with three look-out ships ahead. The speed of approach was at an average of seven knots. The night passed, but about seven the next morning one of these three scouts signalled that six ships were in sight, and then thick weather shut down everything. Now that selfsame morning while Persano was just about to resume his attack on Lissa, the patrol *Esploratore* came steaming in from the bearing of Punta Planca with the signal that suspicious ships

were in sight. Thus, for the second time, Persano was caught in a state of unpreparedness, with no plan and no resolute conviction. On the contrary, Tegetthoff had decided that his own tactics in the event of a fleet action should be to ram and to pour his concentrated broadsides at close range. He was inferior in gun-power, but superior in offensive spirit and determination.

At 10 a.m. the mist cleared, the Austrian fleet sighted Persano right ahead collecting his ships, and with the greater part of his force steaming towards Tegetthoff. The Austrian fleet consisted of twenty-seven units, each of the three divisions being in the formation of a V-shaped wedge: more technically in double-quarter line disposed astern. Quickly Tegetthoff signalled successively to clear for action, close up, look-out ships to their stations, and to proceed at full speed. And then at 10.35 a.m. came the order: 'Ironclads will dash at the enemy and sink him.' There was no mistake about the Austrian admiral's inspiring enthusiasm, and we now begin the memorable battle of Lissa.

The Italian ironclads, having been hurriedly collected and disposed in single line-ahead, were approaching on a N.N.E. course. Note carefully that the van was led by the Italian Rear-Admiral Vacca in the *Principe di Carignano*, followed by the *Castelfidardo* and the *Ancona*. These three were all ironclad frigates of about 4,000 tons. Then came Admiral Persano in the *Re d'Italia*, with the *Palestro* and *San Martino* immediately astern, then a little gap and there followed the

Re di Portogallo and *Maria Pia;* then a greater gap, and the *Varese* brought up the rear. In addition, that brand-new ship, the *Affondatore*, was on the starboard beam of the column.

The Austrian fleet, with Tegetthoff's flagship *Ferdinand Max* at the point of the first V-shaped wedge, was steering about S.E. by S., when at 10.45 a.m. the Italian van led by Vacca passed about eight cables ahead of the *Ferdinand Max*, and opened fire. This was not answered until this first wedge had so far advanced that the port wing ship, the *Kaiser Max*, was at close range, and then the firing became general. Tegetthoff had arranged for the small craft to be disposed for repeating signals, but the third division was to be used—after the example of Lepanto—as a reserve to render succour to the heavy wooden ships as requisite.

It was just before the first shock of battle, about 10.15, that a wild, mad inspiration filled the vacillating mind of Persano and caused him to shift his flag and personal staff from the *Re d'Italia* to the *Affondatore.* Beatty, we know, on one occasion during the Great War, when compelled to shift his flag during action, called a destroyer alongside and made a flying change with little delay. But Persano, of course, had no other means of changing over than by hoisting out his launch, and this required time. After transferring him aboard the *Affondatore*, this boat was cast adrift. Now Persano had never signalled Vacca of his sudden resolve to change ships, and the natural result was that Vacca's squadron continued ahead,

leaving a wide gap between the *Ancona* and the *Re d'Italia*. The result of this hurried alteration at a most critical moment was to throw the Italian fleet into confusion. Not merely this, but the Austrian van was able to pass through that gap between the Italian van and centre, and thus we get a situation somewhat reminiscent of the battles of St. Vincent and Trafalgar. Persano's folly was criminal and deserving of the most serious possible criticism. It was the act of a coward thus to have sought personal safety at that time in his newest ship, but it was downright professional wickedness to have given the enemy such a magnificent opening at the very first. The port wing of Tegetthoff's leading division now turned to port to engage Vacca's squadron, while Tegetthoff's flagship, *Ferdinand Max*, turned to port and made for the Italian centre. The Austrian second division—all unarmoured wooden ships—steered for the Italian rear and then there ensued a regular mêlée. Thus the rest of the battle was fought more in accordance with that of the old galley days at Salamis and Actium. In fact, it resolved itself into attempts to ram, attempts to avoid being rammed, or efforts to succour a threatened ship. So the introduction of steam had really changed methods of fighting precious little, and chiefly altered the means of mobility. Had all those intervening centuries of naval warfare taught nothing?

There was no further tactical scheme; the right wing and centre of Austrian ironclads contested with the Italian centre, while the left wing of the Austrian ironclads and the rear of the Austrian

wooden ships attacked Vacca's squadron — the Italian van. The Austrian second division became engaged with the Italian rear, when the *Affondatore* came forth out of the battle smoke and twice endeavoured to ram the *Kaiser*, an unarmoured wooden two-decker, flying the pennant of the commodore commanding the Austrian second division. This *Kaiser* was a screw battleship of 5,194 tons. Broadsides were fired by both, and both received injury.

Through that smoke now emerged the ironclad frigate *Re di Portogallo* at full speed, also trying to ram the *Kaiser*. The *Kaiser*, however, altered helm, and also at full speed proceeded to ram the *Re di Portogallo*, and struck her on the port side abreast the engine-room, but at an acute angle, thanks to the *Re di Portogallo's* celerity in turning to port just before the impact. However, *Kaiser* was badly damaged, including the loss of bowsprit, foremast and funnel, and stem. The ironclad lost anchors, boats, portlids, besides displacement of her armour, and injuries by the *Kaiser's* shells which hit below the armour. Next, after engaging the *Maria Pia*, *Kaiser* was such a wreck that the commodore took her towards San Giorgio, followed by most of the large wooden ships of the Austrian fleet, of which others were damaged.

Tegetthoff's flagship, *Ferdinand Max*, tried to ram an enemy ironclad, and on the second occasion succeeded in hitting, so that the enemy's mizzen-topmast came down. Now the *Re di Italia*, about 11.20 a.m., was lying with her steering-gear disabled, when she was rammed and sunk by the Austrian

flagship *Ferdinand Max*, and presently the ships of both fleets began to withdraw, and Tegetthoff assembled his fleet at 12.10 p.m., the action having lasted less than an hour and a half. Persano had been defeated and withdrew his fleet to Ancona, having lost the *Re d'Italia* and the *Palestro*—the first by the ram and the second by gunfire. The damage to material was not great, but that to Italian morale was tremendous, and Persano's fleet had no desire to renew the action. On the Austrian side no ship had been sunk, though the *Ferdinand Max* had been much damaged and other units also needed repairs. In this battle the *Re d'Italia* had been rammed and sunk whilst not under command and not under way—it was, therefore, no criterion. But the mere fact that one ship had been sunk by ramming had a great influence on naval thought for many years after, and thus there was propagated that heresy that the ram was superior to the gun; and this fallacious argument was destined to influence the designs of warships for a long time. As regards the *Ferdinand Max*—the rammer—her bow was damaged, as might well be expected.

Tegetthoff had certainly not achieved either a brilliant or tremendous victory, but for all that he had won with a numerically inferior ironclad strength. His tactics were not those of a great admiral, but neither he nor Persano is entitled to praise for cleverness in the conduct of the action. Neither had that professional knowledge which comes from the study of naval history and the problems of maritime warfare. But of the two Persano will remain for all time hardly deserving of

respect. In him was the lack of courage, of the will to win, of the determination to get at the enemy ; he was the very antithesis of the Nelsonian spirit which won the Nile and Trafalgar actions. The spirit of a captain animates his ship : that of an admiral inspires or depresses his fleet.

Persano's influence on his fleet was most unfortunate, and he was subsequently tried, but acquitted of the charges of cowardice and treason. This may seem remarkable to us. However, he was found guilty of negligence and incapacity, deprived of his rank, and dismissed the service. For an admiral's unwritten epitaph it would be impossible to find any sentence more damning and ruinous. It would have been better that he should have gone down in the *Re d'Italia*, from which he had shifted his flag.

CHAPTER XI

BATTLE OF TSUSHIMA, 1905.

It is now twenty years since there was fought in the Korean Strait what has every right to be called one of the great decisive battles in the world's history, one, that is to say, which, had the result been otherwise than what happened, would have materially altered the course of subsequent international development.

We may even go further and affirm that no sea-fight during the twentieth century has had such a tremendous influence as this battle of Tsushima. The full results will be revealed only in the years still to come, but in the meanwhile this Japanese victory had brought about the following effects. It announced for the first time that the white race could be conquered by the yellow; it admitted an Oriental into the aristocracy of nations as a first-rate political power; it has created a situation in the Pacific which is unprecedented and out of which some day there is bound to come such a crisis that once more the trend of world history may receive a sudden and violent change; it has accelerated in the United States the advance towards full naval preparedness, and it has necessitated the spending of vast sums on Singapore. Furthermore, it has roused in the Dutch East

Indies and Australia a certain nervousness which it were mere folly to deny.

On the other hand, the victory at Tsushima dealt autocratic Russia such a severe blow that it never recovered, and rendered easy the Bolshevik upheaval. And it was largely responsible for giving to Germany that military ascendency which was the immediate cause of the Great War in 1914. It put a full stop to Russian aspirations in the Far East, and if in that way one menace to the British Empire was removed, there has arisen another peril not less real. Had the Russian fleet emerged from Tsushima victorious there would have been a Russian Empire of amazing dominance and wealth. Thus, in short, we have in this battle one of the finest proofs that nothing in life happens irrelatively, and that human discernment is unable to perceive the awful results from an apparently isolated incident. Nine years afterwards Tsushima was able to bring about a world conflict which, in its turn, made more history in five years than has ever occurred since the creation of the universe. These are bold statements, but they will stand investigation. And, finally, does not Tsushima show most clearly the influence of sea-power on history?

To Japan this naval victory was essential: it was another illustration of that principle which we have seen expressed in previous chapters. The command of the sea is essential when an overseas army has to be supplied with food, ammunition, and other requisite stores; for had Togo been defeated, Oyama's army no longer would have been able to receive its supplies. Take the matter of

ammunition alone, and consider how limited would have been the Japanese army's endurance if the Russian admiral had made it impossible for any more transports to land. Japan had utilized her maximum military strength and could never have done more on land than at that date. Togo well knew what he was saying when he signalled that the fate of the Japanese Empire depended on that day. But apart from these considerations, Tsushima is so full of interest, so illuminating of certain tactical problems, the rival fleets so nearly matched, and the battle fought out so thoroughly to a conclusion, that it demands our most careful attention.

The cause of the war was as follows. Russia was anxious to have a harbour always free from ice and obtained a lease of Port Arthur from China. The Trans-Siberian railway was carried to Port Arthur; Russia was to become a great naval Pacific power. Russia eventually occupied the province of Amur, but in 1903 Russia and Japan were at loggerheads over the control of Southern Manchuria and Korea; in February of the following year the latter withdrew her Minister, and then the Russian squadrons at Chemulpo and Port Arthur were attacked, and troops landed at Chemulpo. We must pass over the intervening operations, including the fall of Port Arthur, and the practical extinction of Russian naval power in the Pacific: the command of the sea was not Russian but Japanese.

But in October, 1904, another fleet started out from the Baltic under Vice-Admiral Rodjestvensky,

and after steaming half-way round the world made towards Vladivostock. It was on May 27 that at last this numerous fleet reached the straits of Tsushima, which is the eastern half of the Korea Strait, being divided by Tsushima Island, and here the battle took place. The transports—except those carrying war stores—which had come with the fleet, had been detached at Shanghai convoyed by a couple of armed merchantmen, and two more armed merchant ships had been sent off to the east coast of Japan. The Japanese admiral, Togo, was instructed to await the Russian fleet in Japanese waters.

As to the strength and organization of the rival fleets, the Russian fleet consisted of three divisions, each of four vessels. Rodjestvensky's flag was in the *Kniaz Suvaroff*, a vessel of 13,600 tons, with a nominal speed of 18 knots. The armament of each of the ships in this division consisted of four 12-inch guns and six 6-inch. The second division, whose admiral had died shortly before the battle, was armed with four 12-inch in two of the ships, and three or four 6-inch. One of the other ships had four 10-inch and five 6-inch. A fourth had six 8-inch and five 6-inch. The third division between them had a couple of 12-inch, thirteen 10-inch or 9-inch, two 6-inch, and six 4·7-inch. These three divisions were the vessels which were fit to lie in line-of-battle, or, if you will, battleships. Rodjestvensky's fleet also had four cruisers of about 6,000 tons with a united broadside of 27 guns either 6-inch or 4·7-inch; and four cruisers of about half the size with a total broadside of 16 guns,

chiefly 4·7-inch. There were also two torpedo flotillas of nine boats all told. In reckoning the number of guns we are considering those which could be fired on one side.

The Japanese numbered also twelve ships fit to lie in line-of-battle. These were in two divisions, the first with a broadside of 63 guns, including sixteen 12-inch and forty 6-inch. Admiral Togo led this division with his flag in the 15,140-ton *Mikasa*. The second division consisted of vessels of about 10,000 tons able to fire a broadside of 64 guns, consisting of 8-inch and 6-inch. There were also four divisions of four Japanese cruisers, in addition to torpedo flotillas. In comparing the armament strength of the rival battle fleets we see that the Japanese were able to employ 127 to the enemy's 98 guns. In effective speed the Japanese were able to steam at 15 knots compared with the Russian 11 knots. In two most essential respects—guns and speed—the Japanese were therefore by far the superior.

Between Trafalgar and Tsushima there had been only two big fleet actions—Lissa and the Yalu. But during this period the technical progress in both ships and guns, thanks chiefly to Britain, had been remarkable. In respect of 9-inch guns and over the Russians were superior as 45 is to 17 ; but in the guns of from 4·7 to 8-inch the Japanese were superior by 50, and in regard to the 6-inch quick-firers superior by 58. And it is to be observed that in the most decisive part of the battle these secondary armaments played the most important part. The Russian vessels were overwhelmed by the frequency

of the Japanese shells rather than by the weight. On the other hand, be it noted, the Japanese lost not a ship, yet won the battle. As to the personnel, we must remember that the Russian fleet had been steaming for months and come some thousands of miles, that the nerves of officers and men were already strained, and that they well realized they were not likely to emerge from this coming battle alive. The Russian officers were lacking in that knowledge without which no service can expect to be efficient. The gunnery and tactics were neither of them good, the ships were not in satisfactory condition for fighting; and the admiral himself was more akin to Persano than Tegetthoff. As for the men, they were to be pitied. The Japanese ships, on the other hand, were very efficient, the morale excellent, and Togo was professionally able. 'Rozhestvensky's management of the preparation for meeting the enemy,' criticized Mahan, 'appears to me as a whole so blundering, that I am forced to the conclusion he had never clearly thought out his strategic problem and settled down in consequence to a single-minded decision.' The excessive provision of coal on board showed that the Russian Commander-in-Chief was so obsessed with the aim to reach Vladivostock that he failed to realize the one big fact: before he could get there he must defeat the enemy, and this coal interfered seriously with the fighting ability of his ships.

On May 26, as the Russian fleet was coming on from the south it picked up some of the Japanese wireless signals, and at sunset the fleet closed up in

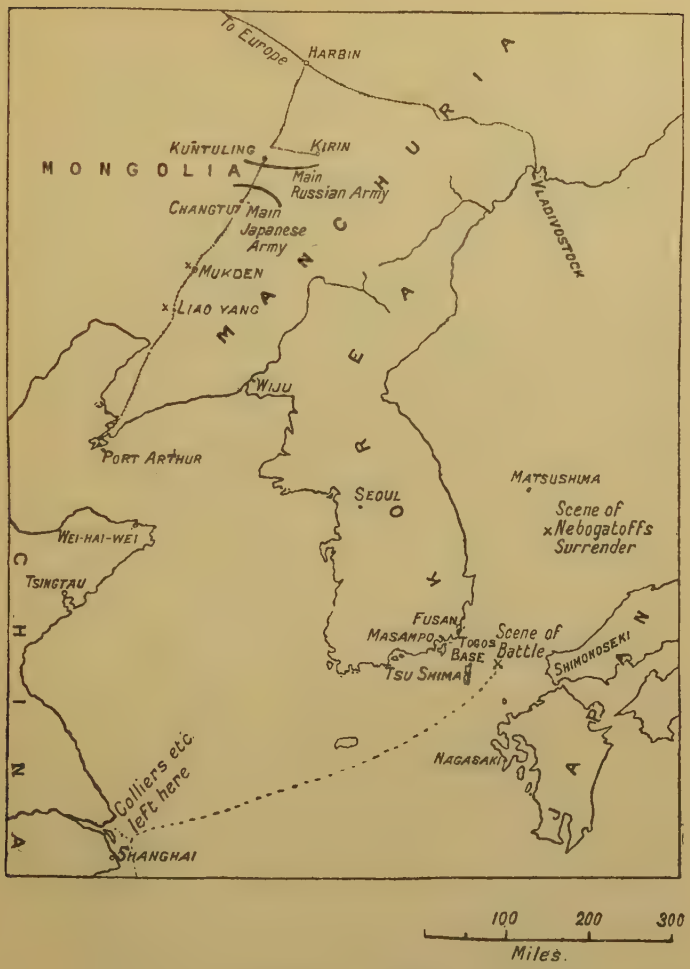
the expectancy of torpedo attack. In the rear were those transports which were intended for Vladivostock containing all the requisite fleet supplies; for the resources at Vladivostock were but limited, and the railway there was able with difficulty to supply the army. It had been a long voyage during which boilers and machinery had made martyrs of the engineering staffs. This Russian force was less a fleet than a mob of ships, hastily collected, untrained, without cohesion. Moreover, besides being inferior in the other qualities mentioned, the Russians were not possessed of those new and better explosive shells which had been recently supplied to the Japanese.

Rodjestvensky was justified in taking the wider, deeper eastern side of the Korean Strait. To the south of Tsushima Island, some sixty miles away, Togo's cruisers were spread as look-outs, and ahead of these were *Sinano Maru* and other Japanese armed merchantmen. It was at dawn on May 27 that the *Sinano Maru* almost ran into the Russian fleet at the rear by sighting the transports. At 6.45 a.m., less than two hours later, one of the Japanese cruisers was seen, but rightly retreated. At 8 a.m. four more Japanese cruisers were descried coming out of the mist, and they, too, retired to the north. Two hours later was seen yet another cruiser squadron. The Russian admiral now formed his battle-line of the first three divisions, with his cruisers to cover them on the port side, and the transports astern of the fleet. At 11.20 a.m. by an accidental shot from the *Orel*, fourth ship in the first Russian division, fire was

opened on the Japanese cruisers, which the fleet took to be a signal from Rodjestvensky's flagship *Suvaroff*. It is not the work of light cruisers to fight a battle-line, but to obtain information of the enemy's formation, numbers, and direction: so this Japanese squadron rightly made off towards Togo, who was well to the northward, and the Russian fleet steered N. 23° E. for Vladivostock. It was now midday and they were on a line with the southern end of Tsushima.

About 12.30 p.m. the Russian fleet was in two columns, each in line-ahead, the first division to starboard, and the second and third divisions to port. Now about 1.20 p.m. Togo, steering to the south-west, suddenly sighted the Russians about six miles off to the south-west, and about the same time the Russians sighted the Japanese. Rodjestvensky, leading the first or starboard division, then increased speed to eleven knots, and altered course to port, in order for this division to take up position ahead of the other two. But there was a most regrettable tactical muddle, and this at a most critical time; for the first division did not succeed in getting right ahead, but forced the second and third divisions even to stop their engines to avoid inevitable collision, and the respective ships had to turn to port and starboard in such a way that the battle-line was in utter confusion.

Anything less seamanlike or less proper for a fleet approaching battle can hardly be conceived except in the mind of a comic artist. Had it been in manœuvres it would have been reprehensible



MAP TO ILLUSTRATE THE BATTLE OF TSUSHIMA.

enough, but here they were in the presence of the enemy; for at about this time the Japanese battle fleet could be seen through the mist, and the latter forthwith turned in succession to N.W. by N., presently to W., then (in order to make the enemy imagine the Japanese fleet was about to pass on opposite courses) turning in succession to S.W. by S.; and, finally, Togo's flagship *Mikasa* at 1.45 p.m. turned to E.N.E., and her ships astern of her were beginning to turn. The next astern was the *Shikishima*, and by 1.49, when only these two out of the twelve had turned, the Russian flagship *Suvaroff* fired the first shot at a range of 6,400 yards. The gunnery was bad, and then in a couple of minutes the Japanese opened fire. Following the *Suvaroff*, all the first Russian division opened fire on the leading Japanese vessels, though at least one ship did not commence action until ten minutes later. Had Rodjestvensky only possessed the quick mentality to appreciate a unique chance, had his gunnery and shells been what they might have been, there was ready waiting for him about 1.45 such an opportunity as no admiral should have missed.

For Togo had made a tactical error, and taken on a tremendous risk. His fleet were turning in succession as individually the Japanese ships reached a certain point. This point was, in other words, a fixed target, a gauntlet if you like, through which each unit was to pass. Therefore, it was a sure thing; it was an easy range, and the aim was easy, too. The Russian fleet in those tense minutes had a chance that seldom has occurred in all naval history to roll up the enemy. But Rodjestvensky's

organization was not able to take advantage of this wonderful opportunity.

We have then to watch two fleets, each of twelve ships, in single line-ahead, steaming not quite on parallel courses, for presently the range kept on decreasing; but the Japanese with their superior speed had the advantage of mobility. Their fire on the leading Russian ships was excellent. 'I had not only never witnessed such a fire before,' wrote Captain Vladimir Semenoff, who had been serving six months in the Russo-Japanese War with the Port Arthur squadron, and had been present at the action of August 10, 1904, and now was aboard the *Suvaroff*, 'but I had never imagined anything like it. Shells seemed to be pouring upon us incessantly, one after another.' Steel plates, or rather the paint on them, caught fire; it seemed as if mines rather than shells were hitting the ship's side and falling on deck. Superstructures were torn to pieces, the living were slipping in pools of blood, and it was only 2.5 p.m., at which time the Japanese were seeking by means of their superior speed to 'cross the T' of the Russians—that is, to form with Rodjestvensky's fleet a right angle, and thus be able to concentrate the maximum fire on the leading Russian ships. Concentration! It was that sound tactical principle which the Japanese had learned from us, and we had learned in long years of hard experience. In order to prevent the enemy's endeavour, the Russian admiral immediately and correctly altered course four points to starboard—that is, away from the enemy.

But the Japanese got the range well. Their shells had a bursting charge seven times stronger than the Russian, which burst badly, and about 2.20, even inside *Suvaroff's* conning-tower there were half-a-dozen dead. About five minutes later the Japanese turned from E. to S. 67° E., thus inclining to starboard, having by their speed got still further ahead, and began making another effort to cross the Russian T. The Russian admiral met this move by starboarding also. But the *Suvaroff* with her wrecked rangefinders and her after-turret blown up and foremost funnel knocked down, and a panic among the crew, was already in a poor way, and then the steering gear carried away so that this flagship became out of control and was passed by the rest of the Russian fleet. Finally, both funnels and foremast missing, enveloped in smoke and flames, battered beyond all recognition, still fighting with her guns, yet still subjected to the enemy's hot fire she carried on out of the line pluckily.

The *Alexander*, being the second ship in the Russian line, now took *Suvaroff's* place, and was compelled to incline to the south in order to prevent the Japanese crossing the T. The *Oslyabya* had also quitted the Russian line; she was the flagship of the second division, the remaining vessels were thrown into confusion, and the third division found themselves ahead of the second. *Oslyabya* was presently sunk. Togo turned his division together eight points to port and then to port again eight points. The Russians, however, turned to starboard in succession, sixteen points,

about 2.50. The Japanese second division, under Vice-Admiral Kamimura, turned and passed the Russians, who by faulty tactics threw all their guns off the enemy. Before four that afternoon the battle had been lost and won. *Suvaroff* lost her last turret, the forward 12-inch smaller guns had been torn off their mountings, and she was much worse off than before, and the engine-room men were being suffocated, as the ventilators were bringing down smoke instead of air. By 5 o'clock the *Alexander* was already so damaged that the water was almost entering the lower battery port-holes. Rodjestvensky, seriously wounded, was taken off by a Russian torpedo-boat. There was a fresh breeze, a nasty swell, and dusk was coming down; at 5.30 the *Alexander* sank, and still the flashes of the Japanese guns gleamed through the growing darkness. About 7 o'clock Japanese torpedo craft were sighted, and during the night a series of attacks was made by them against the remaining Russian ships, but only two or three of the already badly-damaged ones were torpedoed. Next morning the third and final part of the battle took place when the remaining four ships were forced, after some fighting, to surrender. The torpedo-boat with Rodjestvensky was chased and captured. Out of that entire Russian fleet which left the Baltic for Vladivostock, only one cruiser and a couple of torpedo craft ever reached the Pacific port of destination. Togo had sunk, captured or disabled 8 battleships, 9 cruisers, 3 so-called coast defence ships, 9 torpedo craft, 1 auxiliary cruiser, 6 special service steamers, and 2 hospital ships.

The Japanese lost no capital ship, and only three torpedo-boats. It was indeed a decisive victory.

For a time the war dragged on, but Tsushima had really settled its outcome, and finally in August of that same year peace came with the signing of the Treaty of Portsmouth in the United States. But in spite of the surprisingly favourable terms which Russia got out of the treaty, she never recovered from the shock which this defeat had given her. But to the British Navy there were lessons, already learned but now emphasized, which were not to be despised. Briefly, from Tsushima the following clear points suggested themselves and received attention during the nine years which followed before we found ourselves in the greatest of all wars.

Firstly came the importance of tactics — so handling a fleet that every ship can bring about the greatest concentration of guns to bear on the enemy. Secondly, the rapid finding of the range, and, this having been found, maintaining it by steering on a parallel course at the same distance and requisite speed. Thirdly, the importance of superior speed by which it is possible to dictate your own range. Fourthly, the practical value of concentrating fire on the van of the enemy, not merely for the reason of destroying the leading ships or even putting them out of action, but for the additional reason of throwing the rest of the enemy's line into confusion. And still more so when the flag of the Commander-in-Chief is flown in the leading ship. Fifthly, the super-importance of keeping your guns always trained on the enemy.

The Russians lost this battle, wrecked the future destiny of their nation, by neglect of previous staff study and personal training, and this neglect, in turn, showed itself in the bad handling of the fleet so that the guns were not kept on a proper bearing, and fired neither accurately nor rapidly. According to the admission of a Russian aboard the *Orel*, which was the fourth ship in the line, the Japanese hit her thirty times in ten minutes, twelve of these shells being 12-inch. Tsushima was fought during an afternoon, a night, and during the following day. But the actual result of the battle was decided within one hour of the first shot being fired; the rest of the fighting was merely elaboration of this decision. Thus the value of an alert mind, trained by personal study to appreciate a situation and to react in accordance with previously digested principles; the value of a fighting machine so perfect in its organization that it obeys the right thinking Commander-in-Chief, cannot be estimated too highly. The Russian fleet was beaten long before it began to leave the Baltic; for it is during peace that the victories of war are won. Let us, now, in conclusion, see how the only really decisive battle by sea during the Great War illustrated any of these principles.

CHAPTER XII

BATTLE OF THE FALKLANDS, 1914.

And we shall find here a most intriguing comparison with the temperament and skill of Rodjestvensky. Even in spite of the tremendous importance which material now plays in modern naval warfare, the value of personality and personnel is immense, for, after all, it is the force which controls the ships and the guns. Let us, therefore, begin this chapter biographically from the standpoint of the future victor at the battle of the Falklands, for the man was both representative of the best contemporary naval opinion and himself a moulder of thought.

Admiral F. C. Doveton Sturdee, when a junior officer of twenty-seven, had won, exactly twenty years after the battle of Lissa, the United Service Institution's gold medal for his essay on the changes in conditions of naval warfare owing to the introduction of the ram, the torpedo, and the submarine mine. His essay had begun with a system of training for seamen gunners, and included a system of battle tactics. In this expression Sturdee showed that he had appreciated the changes through which naval progress was passing, and he outlined an educational system for naval officers on a far wider plan. Instead of the purely mathematical training, attention was to be paid to such

[*Imperial War Museum. Crown Copyright.*

ADMIRAL SIR F. C. D. STURDEE, BT., K.C.B.

To face p. 254

matters as history, strategy, and international law, all of which were more than thirty years later embraced by the Staff College.

At the beginning of the Great War in 1914 Sturdee was at the Admiralty as chief of staff, after having thrice served as flag officer afloat. The naval staff was itself a new creation, to which he had by his influence and far-seeing mind largely contributed. But in his capacity as an Admiralty official Sturdee was to receive much criticism up to and including the disaster of the battle of Coronel, when on November 1 Admiral Craddock was defeated by von Spee's squadron with such heavy loss. Into that controversy we need not enter, nor to revive that gloom which settled down over the British nation, whose prestige at sea had been so wonderful ever since the battles of the Nile and Trafalgar. It was worse than a mere isolated defeat, for it gave, temporarily at least, to the Germans the command of the sea in the neighbourhood of South America ; it was the closing of the great trade routes at a time when Britain needed them to be kept open. But our shipping was compelled to remain inside South American harbours or else run the big risk of being captured. Nor did it rest there.

For there was no telling exactly what von Spee's victorious squadron might not attempt next. He could play havoc with the Atlantic trade routes, especially from the Plate and West Indies, those historic sea lanes where commerce had been attacked in the days of sail, and now were even still more alluring ; or he could make for the south of Africa,

interfere with Botha's operations, and even refresh his ships at Capetown. Any one of these possibilities was sufficiently alarming. The obvious remedy was to wipe out von Spee's force with the utmost despatch, and for the accomplishment of this duty Sturdee, with his long study and practical sea experience, was chosen. Nor was it an undertaking to be made lightly or inadvisedly, for against him was one of the crack German squadrons famous for the excellence of its gunnery.

On November 5 there were detached from the Grand Fleet those two battle-cruisers, *Invincible* and *Inflexible*, which left Cromarty, and then going west about reached Devonport three days later. Here, as a result of efficient dockyard organization and special acceleration, both vessels were so quickly got ready that they were able to set out on the afternoon of November 11, Admiral Sturdee's flag flying in the *Invincible*. It was a triumph of system that within less than a week of the news announcing Craddock's disaster, these two battle-cruisers should have steamed down from Scotland, been docked and their bottoms cleaned, taken in six months' stores, completed with coal, and then started off at twenty knots on a mysterious mission. And the secret was most marvellously kept. A number of British cruisers already in the South Atlantic were to join these two battle-cruisers at a certain rendezvous.

Thus, avoiding trade routes, altering course when necessary to prevent being sighted by shipping, and not using their wireless, calling at Cape Verde only to coal, thence steaming across the Atlantic to the

Abrolhos Rocks—the secret rendezvous, thirty miles off the Brazilian coast, which was reached on November 26—Sturdee's force was increased by the cruisers *Carnarvon*, *Kent*, *Cornwall*, *Glasgow*, and *Bristol*. These seven vessels left on November 28, and then steered for the Falkland Islands in extended formation with *Invincible* in the centre, and the ships ten miles apart from each other, the object being to make a sweep, so that von Spee's squadron, if bound up along, should not slip through. At the same time, this formation, with the flagship in the centre, made it practicable for the rest of Sturdee's ships easily to concentrate. It must be borne in mind that at this moment neither Sturdee nor von Spee had knowledge of the other's movements, though it is a fact that on the very day that the former had reached the Abrolhos Rocks the latter was leaving St. Quentin Bay (Gulf of Penas, about 300 miles north of the western end of the Magellan Straits) and proceeding south. On December 3 Sturdee was joined by the armed merchant cruiser *Macedonia*.

As to Sturdee's individual ships, the *Invincible* and *Inflexible* were sisters of 17,250 tons displacement, speed 25 knots, armament eight 12-inch and sixteen 4-inch. The *Inflexible* and *Indomitable* had been the first of an entirely new type of warship, originally called armoured cruisers, possessing both the speed of cruisers and the fighting power of a battleship: hence their eventual designation as battle-cruisers. The *Inflexible* had been completed in 1908, and the *Invincible* in the following spring. The latter ended her days when she perished with

Admiral Hood at Jutland. *Carnarvon,* flying the flag of Rear-Admiral Stoddart, was of 10,850 tons, speed 22 knots, armed with four 7·5-inch and six 6-inch guns. *Kent* and *Cornwall* were sister ships, each of 9,800 tons, speed 22 knots, armed with fourteen 6-inch and eight 12-pounders ; *Bristol* and *Glasgow* were each of 4,800 tons, speed about 25 knots, armed with two 6-inch and ten 4-inch guns. The armed liner *Macedonia* was of 12,000 tons gross, speed 18 knots, armed with eight 4·7-inch guns. This was, therefore, somewhat of a scratch squadron, with little homogeneity in speed and armament. But the victory which was to follow was due rather to the right tactical employment which was made of the five different types of ships embraced in that squadron of eight.

We have seen Sturdee's career. Admiral Jellicoe has referred to him as 'an officer who has made a special study of tactics.' It was Sturdee's tactical skill in handling this squadron with an ability so contradistinctive from that of Rodjestvensky which enabled every ship and every possible gun to do its allotted work. And in this Sturdee was brilliantly backed up by his own officers. 'One of the greatest merits of the action,' he afterwards wrote in a memorandum to his squadron, 'is the small list of casualties, due to the able handling of their ships by the captains, who utilized the power of the guns and the speed of the ships to the best advantage. Further, the effective fire at long range, and the thorough organization, were very evident, and enabled the action to be fought with success against

[*Imperial War Museum. Crown Copyright.*

H.M.S. "CARNARVON"

To face p. 258

an enemy who displayed splendid courage, determination, and efficiency.'

Von Spee's squadron consisted of five cruisers. The *Scharnhorst* and *Gneisenau*, built in 1907 and 1908 respectively, were sister ships of 11,420 tons, 23 knots speed, and armed each with eight 8·2-inch, six 5·9-inch, and eighteen 22-pounders. These were both crack ships, having a high reputation for good gunnery. *Leipzig* was of 3,200 tons, *Dresden* of 3,592 tons, and *Nürnberg* of 3,400 tons. Each of these three was armed with ten 4·1-inch guns, and each of these had a speed of between 22 and 24 knots. Now again we have one of those apparently unimportant incidents making all the difference to big events. But for one slight factor, von Spee would have reached the Falklands two or three days before Sturdee, with what result the imagination can readily answer. This factor was the four-masted British barque *Drummuir*, which was sighted off the Horn. As this sailing vessel was full of a cargo of anthracite, von Spee relieved her of this fuel and then sank her, so that it was December 6 by the time the squadron was again under way. It was this delay which was to prove fatal.

But within less than a month since leaving Devonport, Sturdee arrived off the Falklands, and steamed into Port William with his squadron, for it was now 10.30 a.m. of December 7. As a result of brilliant strategy, clear appreciation, determination to carry out a bold plan, and rapid execution of orders, here was a force that was to create that element of surprise which is one of the principles of victorious warfare on land or sea. In the inner

harbour of Port Stanley was lying on the mud that obsolete battleship *Canopus*, with her four 12-inch and twelve 6-inch guns, as the hitherto sole defender of the Falklands.

Here were three colliers waiting, and coaling was commenced at once in order to resume the search for the enemy on the following evening. All the squadron was inside except for *Macedonia*, which was at anchor outside as look-out ship. At eight o'clock on the morning of December 8 there was taken in aboard the *Invincible* from the shore signal station the following message: 'A four-funnel and two-funnel man-of-war in sight from Sapper Hill, steering northwards.' The *Kent* had steam up, and was ordered to weigh and observe the enemy's movements, and at 9.40 a.m. the *Glasgow* proceeded out, followed five minutes later by the rest of the squadron, with the exception of *Bristol*, who had fires drawn. Referring to this some time after the war, Sturdee remarked that von Spee 'came at a very convenient hour, because I had just about finished dressing, and was able to give orders to raise steam at full speed and to go down to a good breakfast.'

Von Spee had sent the *Gneisenau* and *Nürnberg* ahead to reconnoitre, while he with his three other ships remained about eight miles off. The first two were about five or six miles off the harbour when a sub-lieutenant in the *Gneisenau* was sent up aloft with powerful glasses to ascertain what vessels were in the harbour, and when he reported that he could see two battle-cruisers and five other cruisers, he was at first disbelieved. It was at

[*Imperial War Museum. Crown Copyright.*

H.M.S. "KENT"

To face p. 260

9.20 a.m. that these two German ships with guns trained on the wireless station came within range of *Canopus*, who opened fire at 11,000 yards. The enemy at once hoisted colours and turned away. Von Spee recalled his two ships and away the whole squadron presently steamed at maximum speed first to the eastward, then to the south-east.

At 10.20 that momentous signal was made by Sturdee for a general chase. To have raised steam from cold boilers in so short a time as ninety minutes was a wonderful achievement on the part of the British engine-room staffs. The battle-cruisers soon passed ahead, and in the meantime, a wireless message having been received at 11.27 from *Bristol* that three enemy ships had appeared off Port Pleasant, Admiral Sturdee ordered her to take *Macedonia* and destroy them. These turned out to be German colliers, two in number and not three. After removing the crews, both colliers were that evening sunk by *Bristol* and *Macedonia*.

And here we may mention another possibility that might have been, which may be compared with that incident of the Japanese already referred to in the previous chapter. Had von Spee not made off in such a hurry when he received that signal, had he, on the other hand, concentrated his maximum fire on that harbour entrance as Sturdee's ships were coming out, or enfiladed them whilst still at anchor raising steam, the battle of the Falklands might have had a different result. It was at 12.20 p.m. that Sturdee decided to attack with only the two battle-cruisers and *Glasgow*, in order not to lose advantage of the fine weather

conditions. Ignoring the three smaller cruisers, he worked up to 25 knots with the sole object of bringing *Scharnhorst* and *Gneisenau* to action as soon as possible. In principle, then, we have here a repetition of Nelson's concentration tactics though employed differently. Moreover from now the battle became a series of separate actions, during which big ships were opposed to big ships and one light cruiser against another. Let us first watch the major action.

The *Inflexible* opened fire at 12.55 from her fore turret at a light cruiser, and soon afterwards the *Invincible* fired at the *Leipzig* at 17,000 yards, but the shot fell short. The next round at 16,500 yards so nearly hit the *Leipzig* at 1.20 that the latter with *Nürnberg* and *Dresden* turned away to the south-west. But von Spee's intention for his lighter ships to scatter was frustrated, for in accordance with the British Commander-in-Chief's instructions, they were now chased by *Glasgow*, *Kent*, and *Cornwall*. We shall deal with them after the action between the big ships.

At 1.25 the two battle-cruisers were concentrating their fire on to *Scharnhorst* and *Gneisenau*, when the Germans, the *Scharnhorst* leading, turned in succession about seven points to port steering in single line-ahead, and opened fire. The British battle-cruisers also got into single line-ahead, *Invincible* leading, so that the two forces were on roughly parallel courses, the distance being 16,000 yards. Now here came a surprise, for it was found that the German guns, although only of 8·2 inch, were good for at least the same 16,500 yards, which

was the maximum range of the British 12-inch. On the other hand, the German shells fell at that range almost vertically, while the British shells, whose guns had a lower trajectory, moved more nearly horizontally. It followed, therefore, that a long-range action was in favour of the battle-cruisers.

At 1.30 when the action began the range was about 13,500 yards, but increased till half an hour later it was as mentioned. At 1.45 the enemy hit *Invincible*, but the latter by altering course two points threw the enemy off the range. Fire went on rapidly, till at 2.10 the enemy turned about ten points to starboard. There was now a lull for thirty-five minutes whilst the battle-cruisers, having also turned to the south, began the second chase. At 2.45 the battle-cruisers again opened fire, so that eight minutes later the enemy turned in line-ahead to port and at 2.55 opened fire. For the next twenty minutes, being again on practically parallel courses, the fighting was very fierce, and the range dropped to 10,000 yards. Both of the enemy were hit several times, *Scharnhorst* got on fire forward, and *Gneisenau* was being badly hit by *Inflexible*. The former's shooting deteriorated now, but at this juncture, the time being 3.15, the *Invincible* was so hindered by smoke from funnels and guns that Admiral Sturdee turned his ships in a complete circle. Seeing this, *Scharnhorst* turned round about ten points to starboard. Already her third funnel had been shot away, some of her guns were not firing, and she probably wished to bring her starboard guns into action.

But the battle-cruisers, clear of the smoke, were able by means of their superior speed to choose the range again, and with the enemy now on the port side instead of starboard began to hit the German ships severely. Escaping steam and fires from the shell-holes in her hull soon showed that the *Scharnhorst* was in a bad way, and the second funnel was gone. However, a steady, accurate firing was still coming from the enemy, but at ten minutes before four she was in very bad condition, she was practically without way, and on fire everywhere; but fourteen minutes later, with her flag still flying, she suddenly listed to port, rolled quietly over, lay on her beam ends, and then at 4.17 took a headlong dive into the icy Atlantic waters. Not a soul survived; von Spee had gone; Craddock was avenged.

The *Gneisenau* carried on for some time, but it was a case of three to two, for now the *Carnarvon* had joined up, and at 5.8 *Gneisenau's* forward funnel was knocked over, and being in a serious condition the ship's attack slackened. Seven minutes later she hit the *Invincible*, but at 5.30, with a heavy list to port, *Gneisenau* stopped, with steam and smoke and fires everywhere. Having expended all her ammunition, including practice projectiles, she suddenly heeled over exactly at six, and dived after the manner of her sister. Thus the main strength of the enemy had been wiped out.

As to the enemy's three light cruisers, chased by *Glasgow*, *Kent*, and *Cornwall*, the former with her superior speed drew ahead of her consorts, endeavouring with her 6-inch guns to outrange the

Leipzig (on whom she began to fire at 3 p.m.), and thus give the *Cornwall* and *Kent* a chance to come up whilst the *Leipzig* altered course. It was at 3.36 that the *Kent* was told off to engage the *Nürnberg*, and there was performed the amazing feat of getting twenty-three knots out of an eleven-year-old obsolescent ship designed to do twenty-two knots. The boilers never burst, but she ran short of coal, every spare bit of wood was used for fuel, and about five that evening she got within range of the *Nürnberg*, and when it was becoming dark reduced the range to between two and three thousand yards. The result was that at 6.35 the *Nürnberg* was on fire, ceased to use her guns, and at 7.27, now almost dark, the enemy sank. As an example of sheer doggedness, especially on the part of the Engineer-Commander Andrew and his staff, this achievement was an example of perfect fighting.

Meanwhile, at 4.17 the *Cornwall* had opened fire on the *Leipzig*. Three hours later she was on fire; she turned over and sank about nine o'clock. There remained only the *Dresden*, but, unfortunately, she escaped, went through the Magellan Straits, hid herself for some weeks, and then made for Robinson Crusoe's Juan Fernandez island, where she ended her days. Thus the battle of the Falklands by its decisiveness not merely gave back to the navy that confidence which since Coronel had been withheld by public opinion, but raised the prestige of the service higher than it had been for some time. Still there was another aspect which was not less satisfactory. The annihilation

of von Spee's squadron, which originally had come from the Far East, now left the seas clear for the carrying on of trade and for bringing home those cargoes which were essential to the armies for carrying on the war. *Emden* shelled and beached, von Spee's highly efficient ships handsomely beaten, the whole overseas warfare by Germany underwent a transformation. Sturdee's victory compelled her to inaugurate a few months later the submarine campaign, which from being instituted first in the Narrow Seas, gradually spread to the Mediterranean, the North Atlantic, and then south to the West African coast. Besides these submarines, a very few raiders, such as the SS. *Moewe* and *Wolf*, or the sailing ship *Seeadler*, did manage to break through the blockade, and to harry Allied shipping on the ocean.

But otherwise German naval operations, by means of the decisive result off the Falklands, became for the rest of the war impossible outside the waters that wash the east and south-east coasts of Great Britain. It is thus that the value of sea-power manifests itself. The command of the sea enabled us to move liners and tramp steamers all over the globe; on the contrary, Germany was unable to move so much as a company of soldiers by sea. That possibility was entirely denied her, and Falklands was in reality a tremendous aid to our hard-pressed armies not less than to those who at home were working to keep them supplied. For Sturdee's victory was the result of sound strategy, excellent organization, long training, and perfect discipline prior to setting forth; and, addi-

tionally, when once in sight of the enemy, the elements of speed, gunnery, tactics, and morale did the rest.

And with this historic action we end our investigation. We have seen the fighting of organized fleets right from the first decisive naval battle; we have seen the varying types of ships, and the methods become less crude and more scientific. We have seen the ram give place to the gun, and the means of propulsion pass from the oar to the sail and to engines. But whatever the ship, whatever the means by which she is propelled, the sound principles of concentration remain as unalterable as the sea.

INDEX

Actium, Battle of, 7; preliminaries, 46 *sqq.*; the engagement, 61 *sqq.*
Agrippa, in command at Actium, 56, 58, 61, 66
Ali, Pasha, Turkish commander at Lepanto, 82, 94 *sqq.*
Antonius, Marcus, meeting with Cleopatra, 48 *sqq.*; at Actium, 61 *sqq.*
Arab power. *See* Moslem
Ark Royal, the (1588), 121-2
Armada, the Great, in preparation, 112 *sqq.*; voyage of, 118-19, 123; English forces and equipment, 121-2; the fighting, 123 *sqq.*; the dispersal, 127 *sqq.*
Armoured ship, the. *See* Ironclad
Artemisia, Queen, at Salamis, 35, 42
Austria, naval force of, at Lissa, 226, 230

Beaver, Lieutenant P., letter quoted, 179
Blackwood, Captain Hon. H., letter quoted, 206
Brueys, Admiral, at Aboukir Bay, 187, 188

Cape St. Vincent, Battle of, preliminaries, 167 *sqq.*; the engagement, 172 *sqq.*
Carack, the, fighting use, 76
Cleopatra, meeting with Antonius, 48 *sqq.*; at Actium, 61 *sqq.*; death, 74
Clerk, John (of Eldin), on naval tactics, 154, 176
Collingwood, Captain, at Cape St. Vincent, 174, 177; Vice-Admiral, at Trafalgar, 209 *sqq.*
de Cordova, Admiral, at St. Vincent, 170, 173, 175
Coronel, Battle of, 255

Drake, Sir Francis, 110, 120, 128
Drake, Vice-Admiral, at Battle of the Saints, 142

Eurybiades, Greek commander at Salamis, 21, 28, 31-2

Falkland Islands, Battle of the, 254 *sqq.*
Fighting ships of Armada period, 116; in eighteenth century, 140; after Trafalgar, 216; the age of steam, 221 *sqq.* *See also* Galleys and Sailing ships
First of June (1794), Battle of, 157 *sqq.*
Frigate, the, build and fighting use, 141

Galleass, build and fighting use, 116
Galleon, the, build and fighting use, 76-7, 115-16
Galley, the ancient Mediterranean, build and fighting use, 6 *sqq.*, 62; mediæval build and use, 76-7, 85-6; life on board, 87 *sqq.*; last war phase, 76, 89, 110

de Grasse, Count, at Battle of the Saints, 137, 138, 144 *sqq.*
Guns and gun-power at Lepanto, 89, 93; of Armada period, 116; in eighteenth century, 140, 157-8; at St. Vincent, 172; at the Nile, 189; at Trafalgar, 211, 221; at Lissa, 230; at Tsushima, 242-3; at Battle of the Falklands, 257-8, 259

Hawkyns, Sir John, 109, 124
Holy League, the (1570), 80-1
Hood, Admiral Sir S., 137; at Battle of the Saints, 142 *sqq.*
Hood, Captain (of the *Zealous*), at the Nile, 190-1
Howe, Admiral Lord, 152, 153; in the action of First of June (1794), 158 *sqq.*

Ironclad, the first, 223; evolution of, 224-5
Italy, naval force of, at Lissa, 226, 229-30

Japan, naval force of, at Tsushima, 243
Jervis, Admiral Sir John (Lord St. Vincent), 167 *sqq.*
John, Don (of Austria), 80-1, 82; commander at Lepanto, 90 *sqq.*
Jones, Paul, 138, 144

Kempenfelt, Admiral, 137, 139, 153

Lepanto, Battle of, preliminaries, 76 *sqq.*; the engagement, 92 *sqq.*
Lissa, Battle of, preliminaries, 226 *sqq.*; the engagement, 233 *sqq.*

Medina Sidonia, Duke of, 112, 130
Moslem power in Europe, 78 *sqq.*

Napoleon, first plan for invasion of England, 181-2; expedition to Egypt, 183 *sqq.*; second invasion plan, 200-1
Navy, the Royal, in 1588, 121 *sqq.*; period of neglect (eighteenth century), 133-4; under Nelson, 180; transition to steam, 222-3; the first ironclad, 223-4
Nelson, Horatio, 154, 166, 167; at Cape St. Vincent, 171, 174, 177; Battle of the Nile, 184 *sqq.*; before and at Trafalgar, 201 *sqq.*
Nile, Battle of the, preliminaries, 181 *sqq.*; the engagement, 189 *sqq.*

Octavianus (Octavius), victor of Actium, 51 *sqq.*; at Alexandria, 74
Orion, the, at First of June (1794), 162-3

Parker, Midshipman Wm. letter quoted, 162
Pellion di Persano, Admiral, at Lissa, 227 *sqq.*
Philip II. of Spain, 112, 113, 123
Prevesa, action off (1538), 80

Ramming tactics, with galley, 7, 65, 95-6; with ironclads, 224
Rodjestvensky, Vice-Admiral, 241 *sqq.*
Rodney, Admiral Sir George, 135; at Battle of the Saints, 142 *sqq.*
Russia, naval force of, at Tsushima, 242

Sailing ship, development of, for war, 110-11; last war phase, 216. *See* Fighting ships
Saints, Battle of the, 142 *sqq.*
Salamis, Battle of, preliminaries, 1 *sqq.*; the action, 34 *sqq.*

Shell, introduction of, 222; displaces shot, 225
Signal codes, 139, 153; at Trafalgar, 207
Spain, naval force of, in 1797, 169; at Trafalgar, 211 *sqq.* *See* Armada
von Spee, Admiral, at the Falklands, 255 *sqq.*
Sturdee, Admiral F. C. Doveton, 254-5; at Battle of the Falklands, 259 *sqq.*

Tactics, naval, development of, 131 *sqq.*, 138, 148, 158 *sqq.*, 176; at Trafalgar, 215-16; under steam conditions, 221; lessons of Tsushima, 252
von Tegetthoff, Rear-Admiral W., at Lissa, 226 *sqq.*
Themistocles and sea-power of Greece, 18; in command at Salamis, 27, 28, 31 *sqq.*
Togo, Admiral, 240 *sqq.*
Trafalgar, Battle of, preliminaries, 199 *sqq.*; the action, 202 *sqq.*
Troubridge, Captain, at Cape St. Vincent, 174; at the Nile, 184, 192
Tsushima, Battle of, preliminaries, 239 *sqq.*; the action, 247 *sqq.*

Warrior, the, first ironclad, 223-4
Wynter, Sir William, 122, 128-9

Victory, the, at Trafalgar, 208, 211-12
Villaret-Joyeuse, Admiral, First of June (1794), 158
Villeneuve, Admiral, 200, 201; at Trafalgar, 206

Xerxes, invasion of Greece, 10 *sqq.*; at Salamis, 35, 36, 41

PRINTED IN GREAT BRITAIN BY
BILLING AND SONS, LTD., GUILDFORD AND ESHER

DATE DUE

THE KING'S LIBRARY
3000092729

C0-ACI-579